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A Roadmap To Creativity: The NCWM - New Creative Workshop Model

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ABSTRACT

Today more than ever organizations are seeking creative employees and managers that can deliver more ideas, extraordinary results and more value. Organizations throughout the world try to find ways to leverage their HR capabilities and translate people's diversity and thinking into value. Frequently the result is conflict and frustration and not creativity and success. Furthermore, organizations are facing unprecedented pressure to do radically more with radically less.

This paper is a theoretical summary of a process that has been implemented for years and proven to be successful. We will present a new paradigm that can encourage organizations to adopt methods of training and development that can impact the culture of the organization and generate fresh ideas and solutions embedded in creative thinking. The good news is that everybody is born creative, but that creativity is destroyed during schooling and the inevitable "me to" process evolves, i.e., thinking alike predominates and minimizes serious creativity. The process of creating value requires a proactive strategy to recover and develop creative thinking and achieve better results with superior goals. Training, coaching, budgets, time, leadership, and managerial involvement are all required. A new paradigm must be adopted by the industry—a model that can radically improve skills, embrace the use of creative thinking, encourage risk taking, avoid regret, and accept failure. To succeed in creativity and innovation one must construct a culture and organizational climate that embraces and encourages such a renaissance—learning relevant knowledge is a key tool to achieve this goal.

Keywords: Creativity, education and training.

Sharing Governance Or How To Play Nice In The Academy Sandbox

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ABSTRACT

While much has been written about faculty governance (or its demise) these past 20 years, there continues to be significant disagreement among the various parties (faculty, administrators, trustees) exactly what the phrase implies. Depending upon one's ideology, the term "shared governance" is an oxymoron for advocates of the corporate/business model whereas faculty union leaders would assert that campus operations should, to a very large extent, rest solely with the faculty. That battle continues this day. This session will briefly contrast campus governance some 40 years ago to today's encroaching "top-down" approach. Additionally, we will identify and explicate those three domains of governance (faculty-determined, faculty-advised, and administration-determined). We will also examine specific factors that have contributed to a decreased faculty voice on campuses today. Finally, suggested courses of action designed to reverse loss of faculty input in the decision-making process will be shared.

Influencing Positive Outcomes For Troubled Youth

Dr. Diane Haggis, BHB Education, USA

ABSTRACT

The BHB Theory (Haggis, 2011) was based on an empirical case study that examined teachers' perceptions of what they do in their educational settings to create a positive learning environment for troubled youth in their classrooms. Research - including this study - indicates a need for transformational change in the way teachers interact with students in education programs designed for at risk youth.

Traditionally, approaches to working with troubled youth have been punitive in design. Research indicates that this approach is counter productive and that teachers have the opportunity to build capacity for success with at risk youth through the use of peers; building social competencies; role modeling; relationship building; setting high expectations and fostering student strengths. Understanding what effective teachers working with troubled youth do to create a positive learning environment in their classrooms is critical for identifying factors that influence positive outcome for students in such programs.

The descriptive case study described utilized a mixed methods approach using teachers within two residential schools.

Data analysis revealed that there was significant consensus among the teacher participants about factors perceived as powerfully influential in creating a positive learning environment for students. Consistent with prior research, these factors included providing a classroom atmosphere that supports positive peer interactions, high expectations for student success, promoting students taking responsibility for their own actions, relationship building and creating an environment of trust and respect.

Recommendations for practice are offered.

Keywords: At risk youth/troubled youth, Relationship building, Positive Learning Environment, Teacher perceptions

AUTOBIOGRAPHY

Dr. Diane Haggis, author of the BHB Theory (Bonding, High Expectations and Belief in Success) has over thirty six years of experience in education, twenty of which was spent with special education populations and troubled youth. As an administrator in three institutional settings for at risk youth, and within her doctoral work, the BHB theory was developed which identifies what teachers of troubled youth do to create a positive learning environment for their students. The theory offers a valuable guide in how to strengthen teacher practice for enhancing student skill sets necessary for academic success in alternative education programs.

Clan Culture Features In An Israeli Kibbutz Industry, Lesson Learned

Yaffa Moskovich, Zefat Academic College, Israel

ABSTRACT

This article focuses on one privatized kibbutz factory. The research question was: How did this factory preserve clan cultural features after the process of privatization, while most other privatized kibbutz factories discarded their communal nature and became bureaucratic and highly hierarchic?

While most privatized kibbutz factories experienced worker alienation and frustration, this case study describes an organization with a strong culture of commitment and solidarity among workers. Management, on its part, invests in the workers and encourages them to develop with the factory.

The findings indicate that a double social control mechanism maintains the factory's success. Within a family-like working environment, internal control demands professionalism, commitment, integrity, quality, and innovation. External control, from the surrounding kibbutz community, reinforces communal values.

The Effect Of Framing And Sunk Costs On The Consumer-Brand Relationship

Ross B. Steinman, Widener University, USA

ABSTRACT

The purpose of this research was to determine the effect of framing and sunk costs on the consumer-brand relationship. In a series of studies, the valence of the frame and the magnitude of the sunk cost were manipulated in an experimental manner using hypothetical scenarios. There is an emerging literature on the consumer-brand relationship; recent research suggests that this relationship is moderated by variables including brand personality, product classification, and consumer identification with the brand. However, there is a limited research on the role of framing and sunk costs on the consumer-brand relationship and how this might impact prospective choice. Participants completed a series of consumer attitude and behavior measures following assignment to different framing and sunk conditions. Overall, there was evidence of an interactive effect of framing and sunk costs on consumer choices. Future consumer research topics in the consumer decision-making literature are discussed as well as implications of the research.

The Utilization Of Blended Instructional Strategies In The Classroom By Business Teacher Educators In Nigeria: Enhanced Leadership Required

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ABSTRACT

Based on a survey business teacher educators (BTE) in Nigeria, it may be concluded that the use of blended instruction in business teacher preparatory programs is currently being marginally implemented. It may be concluded that business teacher educators basically rely on traditional face-to-face instructional strategies with perhaps a slight variation toward blended instructional formats. Three possible reasons are the lack of technology available, takes too much time to plan and implement, lack of knowledge as to how to implement it and on clearly definable administrative leadership. New leadership is now required to inspire teacher educators to advance this form of learning. What is occurring here may be reflective of other BTEs in business education programs throughout the continent of Africa. This may be an appropriate time to reverse this trend in teacher training.

Keywords: Business Teacher Education; Blended Instruction; Online Education

INTRODUCTION

Business teacher preparatory programs in Nigeria are continuously looking for better ways not only to attract future teachers but also deliver teacher training in a more effective way. Traditionally, business teacher preparatory classrooms have reflected what is commonly known as ‘chalk and talk teaching.’ This strategy basically reflects the teacher educator having a predominant role in directing the learning process each day and primarily within the boundaries of the actual classroom itself. However, an alternative to this traditional teaching style, generally known as blended instruction, is now available for consideration by those situated in our educational institutions. Intriguing developments in interactive technology have resulted in new educational designs becoming available where physical and virtual environment are blended to increase learning effectiveness. *Blended* instruction, often referred to as hybrid or mixed-modal courses, reflects the teaching of classes by educators where traditional face-to-face instruction is intermingled with web-based learning formats. Due to the newness of blended instruction as a teaching strategy, very little is known as to what degree as well as how it is being implemented in business teacher preparatory programs in Nigeria.

LITERATURE REVIEW: THE DEFINING AND EMERGENCE OF BLENDED LEARNING

Blended learning involves a process whereby a student learns through the convergence of online learning and face-to-face education. Horn and Staker (2011) define blended learning as “any time a student learns at least in part in a supervised brick-and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path and/or pace” (p. 3). Bonk and Graham (2005) similarly describe blended learning systems as a combination of face-to-face instruction and computer-mediated instruction. Correspondingly, a

2003 Sloan Survey of Online Learning (Allen & Seaman, 2009) defines blended learning as a strategy that brings together online media with a face-to-face course.

Watson (2008) predicted that blended teaching is likely to emerge as the predominant model of instruction and become far more common than either conventional, purely face-to-face classroom instruction, or instruction done entirely online. The Center for 21st Century Skills (Connection, 2013) depicts blended instruction as a process that leverages technology for generating new kind of student-teacher relationship that enhances independence, engagement, and achievement. Moreover, blending not only includes technology but the integration of real life learning experiences, such as field experiments, independent study, internships, and study abroad travel.

According to Allen, Seaman, and Garrett (2010), a blended course has anywhere between 30 to 79 percent of online content delivery with the remaining content delivered in a non-web based method such as face-to-face instruction. They further stated that there are many reasons why blended learning is becoming increasingly popular since its emergence as an alternative strategy of instruction. Several reasons for faculty adoption of the blended instruction are to increase student access to and engagement and involvement in the learning process, resulting in enhanced student learning while reducing educational delivery costs (Young, 2002).

Conceptual Framework for Blended Learning

According to Smart and Cappel (2006), what is known about effective learning should be the starting point for designing blended instruction. They emphasize the importance of selecting technology tools that make learning activities more authentic, enable students to become more active in their learning, and require students to interact with others and thus engage in critical thinking.

Shea (2007) in his discussion of a conceptual framework for blended learning analyzed how this instructional delivery approach must reflect the four conditions of adult learning. These conditions are learner centeredness or meeting the goals and interests of the learner; knowledge centeredness or using active, relevant learning experiences; assessment centeredness or finding ways to effectively measure learning so that formative and constructive feedback can be provided; and community centeredness or creating a sense of connectedness and collaboration among learners. Martyn (2003) and Lin (2007) found that effective hybrid instruction incorporates seven instructional practices. These are promoting interaction between students and faculty, enhancing reciprocity and cooperation among students, promoting active learning, providing prompt feedback, increasing time on task, setting high expectations, and recognizing diversity in learning.

Aycock, Garnham and Kaleta, (2002) found that students will not choose hybrid instruction if they perceive a poor integration between the face-to-face and online experiences, or if they feel that online expectations merely result in increased course workload. They therefore argue that faculty need not only find the appropriate blend between online and in-class activities, they must also address possible student issues, such as the lack of technology and time management skills necessary for success in a blended format (Tabor, 2007). Similarly, Tabor (2007) reported that students who disliked the hybrid format indicated problems with finding materials, receiving less instructor feedback, and perceiving the course content to be too advanced for independent learning.

Institutional Support for Blended Learning

Ross and Gage (2007) state that hybrid courses do not fit easily into the organizational structure of higher education. In addition, Dziuban, Hartman, Juge, Moskal and Sorg (2006) advise that successful implementation of a hybrid approach requires many stakeholders come together and work as a team, including faculty, college administrators, department heads, support services and informational technology specialists. They also point out that organizational readiness is critical for successful implementation of blended learning. In this regard, institutions need to be ready to support online teaching by preparing faculty to effectively design and administer blended instruction (Kim and Bonk, 2006).

In addition to faculty training, giving faculty time to learn new technologies and for course preparation, providing financial support through grants, incentives, and workload reduction, and ensuring the reliability of the technologies

used for teaching were also mentioned by faculty as important factors influencing their adoption of new technological approaches to instruction (Dias, Diniz, & Hadjileontiadis, 2014). Research studies have shown that, if designed correctly, blended instruction is an effective learning strategy that can promote student participation, engagement, and interactivity (Dias & Diniz, 2014).

RESEARCH METHODOLOGY

This study attempts to determine the degree to which pedagogical practices associated with blended instructional formats are currently being utilized by business teacher educators in schools situated in Nigeria. The focus of the study is upon finding answers to three research questions

- RQ I: How frequently are blended instructional formats currently being utilized by business teacher educators?
- RQ II: What strategies for blended instruction are being utilized in teacher training?
- RQ III: What concerns, if any, do business teacher educators have regarding the use of blended instructional formats when teaching?

Significance of the Research Area

Business teacher preparatory programs in Nigeria are very important component of vocational education. In the literature reviewed above, blended instruction is seen as a way to enhance teacher effectiveness in the classroom. In this regard, enhancing teacher effectiveness in schools throughout Nigeria is a continual goal of business teacher educators. The outcomes of this study will not only provide insight as to the present use of blended instruction in teaching styles of business teacher educators, but also the future direction for this alternate teaching approach. The study was designed as an exploratory analysis of current practices, concerns, and perceptions of business teacher educators regarding the use of blended instructional strategies.

Study Sample

Participants in the study were from 5 states in the country of Nigeria. Included in the sample were 90 business teacher educators of which 10 were situated in a university; 30, in a college of education; and 50, in polytechnic institutions. The nomenclature for each classification of educational institution used in this study is that provided by the Ministry of Education in Nigeria.

Data Collection Methodology

Given that there is relatively little data on the use of blended instruction in classrooms in Nigeria, we used a written survey that was administered by department chairs in each institution to gather our data. In designing the data gathering instrument, the survey instrument was part of a pilot study consisting of 15 business teacher educators. Revisions were made because of this pilot study. As a result of the trial run when designing the survey, the data gathering instrument was deemed to have content validity. In this regard, the survey resulted in data on the types of blended instruction being utilized, the frequency of their use, and concerns for faculty relating to their impact upon learning. Also part of the questionnaire were questions related to gathering data about the direction that the use of blended instruction is likely to take in both the short-term and long-term in Nigeria. Data were collected between January 2016 and February 2016.

Data Analysis

All responses to the written survey were recorded in Excel spreadsheet. IBM SPSS statistical software package was utilized for developing frequency tables. Of the 90 surveys distributed to business teacher educators, a total of 73 were returned, representing an overall return rate of 81 percent. Of those 73 survey instruments returned, 46 (or 63 percent) were received from business teacher educators in polytechnic institutions; 22 (or 30 percent), from colleges of education; and 5 (or 6 percent), from universities.

Demographics of the Sample. Of the 73 surveys returned, 59 were responses from full-time faculty; 6 from part-time lecturers; 2 from adjunct lecturers, and 4 from heads of educational business teacher preparatory programs. (One respondent did not indicate a title.) In terms of academic ranking, 26 were classified as instructor; 4, an assistant professor; 2, an associate professor and 9, a professor. In addition, 28 indicated other nomenclature in regards to title of position currently held in a business teacher preparatory program in Nigeria. (Four respondents did not indicate their rank.) Finally, in terms of teaching experience, 17 had been business teacher educators for less than 5 years; 13, between 6 and 10 years, and 39 over 11 years of experience. (Four respondents did not indicate length of service on their survey forms).

Degree Blended Instruction Currently Used in the Classroom. As indicated in Table 1, a majority of business teacher educators in Nigeria in the study sample incorporate blended instruction to some degree when working with their students. Of the 73 business teacher educators responding to the survey, 3 teacher educators indicated that they used mostly blended instruction whereby students are required to participate; and 43 or 58.9 percent of those in the sample indicated adopting it to some degree either occasionally or rarely. Correspondingly, 24 or 32.9 percent of these teacher educators indicated that did not adopt blended instruction in their classrooms.

Table 1. Degree Implementing Own Version of Blended Instruction
N=73

Degree	Frequency	Percent
	No.	%
Very Significant Degree/Frequently	3	4.1
Some Degree/Occasionally	23	31.5
Some Degree/Rarely	20	27.4
Never	24	32.9
Don't Know	3	4.1
Total	73	100.0

Kinds of Digital Media Adopted. In terms of some kinds digital media used typically available and used in blended instructional formats, the findings indicate that Google is used most often by those who do implemented technology as an instructional Aid. As noted in Table 2 below, 22 or appropriately 30 percent of the respondents indicated the use of Google as an instructional aid. Also 33 of those responding chose not to respond to this survey item.

Table 2. Blended Instruction: Digital Media Used in Classroom N=73

	Frequency	Percent
Skype	4	5.5
YouTube	1	1.4
Twitter	3	4.1
Face book	9	12.3
Google	22	30.1
LinkedIn	1	1.4
Total	40	54.8
Missing	<u>33</u>	<u>45.2</u>
Total	73	100.0

Styles of Blending Learning. When asked about the style of blended learning formats used in the class, 43 of the 73 respondents or approximately 53.9 percent indicated that they relied on primarily face-to-face instruction in the classroom with some online educational activities occasionally prescribed. In Table 3 below, 8 or 11 percent of the business teachers responding to the survey indicated they mostly relied on online instruction used for delivering in their teaching while 22 or 30.1 percent indicated that they do not use blended learning at any time.

Table 3. Style of Blended Learning Adopted
N=73

Kind of Blended Format	Frequency	Percent
Mostly online with some time required in classroom with instructor	8	11.0
Some required online with student meeting daily in classroom	3	4.1
Mostly classroom instruction face-face with instructor with some online educational activities required	26	35.6
Predominantly classroom instruction with options for students to complete online educational activities voluntarily.	14	19.2
I do not use blended learning at this time.	<u>22</u>	<u>30.1</u>
Total	73	100.0

Concerns About Adopting Blended Instruction. When asked what were their concerns with the use of blended instruction in the classroom, 34 or 46.6 percent indicated a lack of technology available to implement it. Another 15 or 20.5 percent indicated it takes a lot of time to implement. Finally, 11 or 15.1 percent indicated that now knowing how to implement it effectively. (Table 4).

Table 4. Concerns Related to Implementing Blended Instruction
N =73

Reason	No.	Percent
Lack of Technology/Facilities to Implement	34	46.6
Takes a lot of Time	15	20.5
Not knowing how to Implement	11	15.1
Building Mobile Learning into Classroom	6	8.2
Using Appropriate Content	2	2.7
Measuring Learning Outcomes	1	1.4
Missing data (no responses)	4	5.5
Total	73	100

Specific Strategies of Blended Instruction. When asked the kinds of instructional activities adopted in the classroom, flipping instruction (14), using Google Docs (11), and digital bulletin boards (10) were reported as being more frequently used (Table 5). In this regard, less than 20 percent of the respondents indicated using these formats on a frequent basis. On the other hand, using virtual conferencing (50), online chat rooms (48), and writing blogs (44) were most indicated as not being adopted at all by the respondents in this study (Table 5.) In general, 40 to 71 percent of the respondents indicated that they do not use any of the blended instructional formats depicted in the survey instrument.

Table 5
Kinds of Blended Instruction Integrated into the Classroom
N = 73

Instructional Activity	Most Often		Somewhat		None	
	No.	%	No.	%	No.	%
Specific Strategies -						
Flipping Classroom Instruction	14	19.2	18	24.7	32	43.8
Using Google Docs for Completing Team Reports	11	15.1	22	30.1	31	42.5
Using Digital Bulletin Boards to Share Info.	10	13.7	14	19.2	41	56.2
Writing Blogs	6	8.2	16	21.9	44	60.2
Using Online Chat Rooms	4	5.5	14	19.2	48	65.8
Using Distance Online Learning for at least 1/3 of course	3	4.1	19	26.0	43	58.9
Using Skype or Similar Software to Hold Virtual Cnf.	2	2.7	12	16.4	50	68.5
Using YouTube for Posting Photos, Videos, etc.	1	1.4	11	15.1	52	71.2

Model of Blended Learning Adopted. In terms of identifying a specific model for implementing blended instruction, 57 or 78.1 percent of the respondents were not familiar with three models typically reflecting teaching approaches (Table 6). Only 5 business teachers were familiar with the Rotation Model; 5, the Enriched Virtual Model, and 2, the Flex Model. Therefore, approximately 15 percent of the respondents were familiar with these 3 basic formats for implementing blended instruction.

Table 6. Implementation Model of Blended Learning: Most Knowledgeable
N=73

	Frequency	Percent
Rotation model	5	6.8
Flex Model	2	2.7
Enriched Virtual Model	5	6.8
I am not familiar with above formats	57	78.1
Total	69	94.5
Missing Responses	<u>4</u>	<u>5.5</u>
Total	73	100.0

Administrative Leadership in Promoting Blended Learning Formats. There were 32 of the 73 business teacher educators in the sample indicating that blended learning is not something they see as occurring in their BTE programs (Table 7). On the other hand, 26 or 35.6 percent of the respondents to see that their units have established goals and have implemented policies to guide teacher educators its use in their programs. However, only 1 respondent indicated that their chair was actively promoting its use in the class.

Table 7. Leadership in Department/Unit to Promote the Use of Blended Learning Formats in business teacher preparation
N-73

	Frequency	Percent
Specific goals have been established for its use in the classroom	12	16.4
Policies are in place to guide teachers in its implementation	14	19.2
The chair actively promotes its use in the classroom	1	1.4
Faculty discuss its use informally during faculty meetings	7	9.6
Our faculty generally does not use blended learning formats.	32	43.8
Total	66	90.4
Missing Respondents	<u>7</u>	<u>9.6</u>
Total	73	100.0

Future Use of Blended Instruction in BTE Program. When asked how would they likely see the use of blended instructional formats as part of the general instructional methodology used by business teacher educators in their department/unit, 50 of 68.5 percent of educators in the sample indicated that they expect to see more integration into their instructional methodology. However, 13 or 17.8 percent that do not see any significant use of blended instruction in their BTE program over the next 12 months (Table 8).

Table 8. Your Expectations for Incorporating Blended Learning in BTE program
N=73

	Frequency	Percent
I expect to see more use of blended learning in our BTE program in the future	50	68.5
I expect to see about the same degree as now used in my program	4	5.5
I expect to see lesser degree of its use in the classroom	3	4.1
I do not see business teacher educators in my program adopting blended learning to any significant degree	<u>13</u>	<u>17.8</u>
Total	70	95.9
Missing Respondents	3	4.1
Total	73	100.0

CONCLUSIONS

It may be concluded that blended instruction, as part of instructional methodology in business teacher preparatory programs in Nigeria, is currently being marginally implemented. Business teacher educators appear to be at the beginning stage of considering blended instruction as an appropriate approach to teaching. It may be concluded that business teacher educators basically rely on traditional face-to-face instructional strategies with perhaps a slight variation

toward blended instructional formats. Blended instructional formats appear to have been adopted by a small minority of business teacher educators. Three possible reasons are the lack of technology available, takes too much time to plan and implement, and lack of knowledge as to how to implement it. The finding that 78 percent of the respondents have no knowledge of the three primary implementation models is perhaps a major factor for not adopting blended learning as a part of their instructional methodology.

It may also be concluded that a large majority of business teacher educators would like to see the use of social media expanded over the coming 12 months. There appears to be a willingness on the part of business teacher educators to engage themselves in the process of becoming more informed as to how to use it in the educational process. Moreover, it may also be concluded that unit administrators, in particular, are not currently providing systematic leadership to either promote or guide business teacher educators in their use of social media. However, there are goals and policies already in place to assist the movement into the use of blended instruction. *Therefore, it may be concluded that unit chairs must become more active in a process in taking the lead for promoting blended instruction to enhance the effectiveness of teaching. Such an expansion of blended instruction is a strategy that could generate additional funding to support and even expand business teacher education in the future. It is concluded that business teacher educators are receptive to moving ahead into blended instruction if resources and training are more available to support their efforts.*

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The Relationship Between Practicing Participative Leadership And Professional Competency Level Of Saudi Kindergarten's Principals

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ABSTRACT

The study aimed to identify the extent of practicing participation leadership for the kindergarten's principals from the prospective of kindergarten's teachers, and how the principals' practices of participation leadership's pattern contributes in determining the level of their professional competency. Also, this study aimed to identify variances amongst sample responses in accordance to the study variables (qualifications, educational background, and years of experience). The statistical-descriptive approach is used, which is based on the description of the phenomenon and studying it as on the real world, and to express it qualitatively and quantitatively. The description is used for frequencies, averages and other statistical calculations. The research adopted a random sample of teachers in public kindergartens in Jeddah, Saudi Arabia, those teachers were (410), the questionnaire was distributed to (5) teachers of each public kindergarten, which is equivalent to total of (165) teachers representing (39%) of the population. However, the retrieved number of questionnaires were (120), which indicates that the study sample consisted of (120) teachers. The study gathered information through a survey, which consisted of two parts; the first part covers demographic data, and the second part covers two areas: 1) participative leadership divided into four dimensions (practice, decision-making, characteristics of participative managers, and human relations) which is consisted of (46) items, and 2) professional competency divided into four fields (planning and implementation, guidance, monitoring and evaluation, sustainable professional growth) which consisted of (24) items. The study results are as follows: The level of practicing participative leadership scored high in all dimensions from the sample perspectives with a mean of (4.19). Similarly, the professional competency level of principals is high in all fields with a mean of (4.24). While, there were significant differences between the sample responses in the level of practicing participative leadership dimensions and professional competency fields in accordance to the variables of the study, there were also a high correlation between the level of participative leadership and professional competency with a value of (0.923) at a significance of (0.00). The study recommended providing training and development programs in practicing leadership generally and participative leadership particularly for the kindergartens principals. Likewise, incorporating participation leadership skills in the principal's annual evaluation form. One of the contribution of the study is the list of professional competency areas (derived from the study tool) for the process and forms of nominating kindergarten's principle to raise the applicants' efficiency level. The study highlighted the importance of adopting an educational participative leadership program within the development programs for school leaders and teachers' training programs.

Keywords: Leadership, Participative Leadership, Professional Competency, Kindergarten Principal, Saudi Kindergarten.

Students' Perceptions Of The Use Of Mobile Learning In The UAE

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ABSTRACT

The following study explores the major advantages and the challenges that the students had experienced due to the introduction of Mobile Learning in their courses. Based on surveys and interviews conducted to nearly 400 students, a qualitative method was used to analyze responses from participants who responded to some closed ended and to some open ended questions especially in terms of their experience for involving the use of the technological devices for the purpose of their education. The results of these methods revealed that the majority of students indicated that they were able to study with the help of these devices during anytime and anyplace which enabled them to meet any deadlines they had for their tasks much faster than without using such technological devices. Apart from this, students indicated that they faced some difficulties in terms of access to networks in most places due to their most work required some sort of network connection in order to complete them. The survey showed that the majority students faced the challenge of distraction due to using such devices during classroom lectures that made them to engage in other works rather than using them for their classroom works. Majority of the students preferred to have devices with larger storage capacity with the capability to open any file that are required which are not existed in most of the devices. However, the interviews results indicated that the battery life of such devices prevented the students to carry on with their works that they were engaged in especially during the times of quizzes and the presentations in which such devices play an important role. The interview of the students revealed that writing mail and submitting their works directly with help of emails had helped them a lot in completing their works. Apart from this, lack of knowledge in terms of using such devices affected most of the students by decreasing their motivation to work with such technological devices. Furthermore, analysis revealed that the majority of the students preferred to get engaged in such kind of mobile learning in order to increase their opportunities for a job in the job market which is required by different fields of education and work.

The Millennial Generation And American Politics - The Unknown Future

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ABSTRACT

This study was conducted with the purpose of understanding recent millennial college graduates and how both President Obama's administration and President Trump's administration could have a direct effect upon the generation. When conducting the research, the purpose was to find out which sectors of the administrations' policies would have the biggest effect on millennials both now and in the future. Former President Obama and President Trump have extremely different views on how the nation's current economy, its healthcare system and its position on foreign policy will facilitate the economy in the future. The study associates the policies of each administration and the implications of each – given the general beliefs and attitudes of millennials. Many of President Obama's policies align with the moral code of most millennials. President Trump's proposed plans may help bolster the American economy as well as the job market for millennials, but his ideologies do not align with that of most millennials. That disconnect between the results and the means to attain them makes it hard for a majority of millennials to support the current administration and its policies. That said, without millennial support, is our current administration on a crash course to destroy the support needed to run our great country effectively and efficiently? Our paper will examine the facts and justify our findings.

An Analysis Of Selected Aspects Of Written English Concord Errors Among Grade 12 First Additional Language Learners In South Africa

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ABSTRACT

English is used as a medium of instruction and learnt as a subject, as First Additional Language (FAL), by non-mother tongue speakers in South Africa. By the time learners reach Grade 12, they would have spent nine years of learning English. However, as part of learning, even after this period, learners still commit errors in concord/ subject-verb agreement (SVA). Therefore, this paper analysed four aspects of written English concord errors committed by Grade 12 English FAL learners, which are: collective nouns, indefinite pronouns, subjects expressing amounts, fractions and measurements and subjects which come after the verbs. The study was conducted on 72 sampled English FAL learners in Vhembe District. The study employed the quantitative method. Learners responded to the questionnaires which tested the mastery of the selected concord/SVA usage. The findings revealed that concord/SVA was a challenge to the many of the participants. Based on the findings, the following recommendations were made: teaching of grammar should be intensified, and that teachers of English should be retrained even if it will be through the in-service programmes.

Enhancing The Quality Of Online Mba Programs And Student Satisfaction

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ABSTRACT

Reflecting similar global business patterns, employees are continuously pursuing means to set themselves apart from their colleagues, including through education. With the advances in technology, availability of online business programs, marketing of university degrees, and the convenience offered through online education, there has been an explosive growth recently in online education, particularly for business degrees, both at the undergraduate and MBA levels. Overall enrollment in U.S. MBA programs has actually decreased in the past five years but enrollment in the online degrees continues to increase.

Given the growth and emphasis in online MBA programs, there has to be measures of quality assurances and ensuring student success through learning outcomes and ability of students to develop the requisite competencies necessary to excel in organizations. Furthermore, Universities have to be using the relevant technologies, students have to demonstrate behaviors that would enable them to succeed in online programs, and faculties have to adapt teaching strategies. So, what actually fosters success and student satisfaction about MBA programs? This paper examines how online class interactions and quality of instructor online feedback can lead to successfully completing an online MBA course and subsequently the MBA program.

From The Top Of The Class To The Top Of The Company, Building The Next Generation Of Information Technology Leadership, Innovation And Success

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ABSTRACT

Over the last decade (2007 to 2017), there have been very few true innovative leaders developed in the Information Technology Industry. The days of continuous innovation and leadership in the spirit of Larry Ellison (Oracle), Steve Jobs (Apple), Bill Gates (Microsoft), and Larry Page (Google) have come and gone. Jobs (passed away), Gates (philanthropy focused), Ellison (lesser role), and Page (CEO of Alphabet) have removed themselves from their innovation/leadership roles that brought Apple, Microsoft, Oracle, and Google to the forefront. Their replacements and many of the other corporate technology leaders that are operating the largest software/hardware companies in the United States are operational and not strategic innovators/leaders. This lack of innovative leadership has led to a dearth of new and innovative technologies across the Information Technology (IT) world. Most innovations in the hardware/software industry are recreations of previous models like cloud (hosting), nosql (sql) and iPhone 7 (iPhone 6); original technologies repackaged and remarketed with fancier names and missions which take advantage of advances in circuitry and componentry but are not true innovations.

This paper will explore a new educational technique on campus which cultivates and harvests the leadership/innovative aspects of Information Technology professionals and students. Today's educational world for IT students is very product and technology specific and few educational requirements focus on innovation and leadership. This paper will identify a technique that can be used in the education of the Information Technology field/students to cultivate their innovative/leadership side and help them develop into successful Corporate CEO's of the years 2025 through 2050 as opposed to technology based positions such as developers and engineers.

This study proposes a set of workshops in addition to the standard curriculum during undergraduate college that a group of students will participate in. We predict the workshops will increase the chances of these students becoming innovative, successful and leaders in the Information Technology field.

PREVIOUS RESEARCH

The research to date performed in the area of preparing an IT student for success/leadership/innovation in the IT industry is sporadic. A summary of research in each of those categories is listed below.

Success

Sagen, Dallam and Laverty (2000) studied the relationship between post undergraduate success (obtaining a job) and conditional effects (such as internships and GPA), however, overall, no single variable was found to generate success after undergraduate completion throughout all majors studied. Rateau, Kaufman and Cletzer (2015) found supporting results that classroom strategies can influence success in the workplace. Rateau, Kaufman and Cletzer (2015) also recognized "there remains a workforce readiness gap which signals a deficiency in higher education preparation of college graduates for success in the workplace. The connection between economic successes of the graduate is reflected in the employers' willingness to pay a premium for such skills." Rateau and Kaufman (2009) discussed the

role of higher education in preparing students for employability and determined there is an apparent gap in teaching methods.

Leadership

Companies are spending a large amount of time and money on developing, implementing and tracking leadership programs (Aitkens and Higgs, 2010). These vary between companies but overall, they are developing the same fundamental skills. Instead of waiting for a company to hire a new employee to begin this development, this research is focused on the concept of developing those leadership skills while they are still in college.

Roe and Toma (2016) found that MBA graduates had technical and quantitative skills but they were not well versed in areas such as management and leadership. Roe and Toma (2016) also found that many tenured professors have only worked in academia and don't have professional experience in the areas they teach. This paper focuses on teaching leadership skills at the undergraduate level. Roe and Toma (2016) discussed changing capstone courses to help prepare graduates for entering the work force but the workshops in this study (discussed later) will address this same need two to three years sooner without the additional cost of graduate school.

Innovation

Continued innovation is a challenge across many businesses (Kinson, 2017). It is important to keep pace with the continual change occurring in IT to build a set of human innovators that can strategize and keep up with the change. Kinson (2017) believes that corporations should assign a center of excellence made up of executives from various divisions to oversee the development of corporate innovators.

Gujral (2017) discussed leaders "unleashing the human capital within their organizations" in which employees of all levels are encouraged to initiate new ideas. Even though Gujral (2017) was specifically referring to the Government workforce, this is still applicable to the IT industry as well. If students become leaders, they should encourage their peers and subordinates to share and develop new ideas.

Hypothesis

We hypothesize that a college student who participates in the workshops (noted below) will achieve 1) a higher level of leadership status, 2) more success in the organization and 3) will develop more 'new'/innovative products than a student who does not participate in the workshops.

If our hypothesis is correct; that students can be taught to be leaders and innovators during college, this will reduce the need for companies to spend time, money and effort developing these traits once they are employees. These graduating students will stand out more amongst the others looking for a job and should be able to promote quicker through the company. This also shifts the cost of training and developing from the company to the college.

Selection

This longitudinal study will solicit participation from incoming freshmen who have declared an IT major at George Mason University. An email will be sent to all freshman with a declared IT major during freshmen orientation week. The email will specify that by participating in the study, students will agree to 1) if applicable, participate in workshops (detailed in following section) 2) complete survey when completing undergraduate degree and receive \$25 once the survey is returned 3) complete survey 1 year after graduation and receive a 20% discount coupon to the George Mason University bookstore 4) complete survey 5 years after graduation and receive a 20% discount coupon to the George Mason University bookstore and 5) complete final survey 10 years after graduation and receive a 20% discount coupon to the George Mason University bookstore.

There will not be a limit on the number of participants from the incoming freshman class with declared IT majors. The resulting group of students that choose to participate will be listed in order by their high school graduating GPA listed on their college application. The first student listed will go into group A, second will go into group B and will

continue to alternate back and forth. By sorting the groups this way, the average GPA for group A and group B will be about the same. Control group A will take the standard IT courses at George Mason University with no additional requirements. Control group B will also take the standard IT courses but will have to attend 8 workshops throughout their 4 years of college (see workshop section below for details).

Participation in the study will not alter/influence the degree the student receives but the students who participate in the workshops (Control Group B) will receive a certificate of completion that they can cite on their job applications/resume.

WORKSHOPS

There will be 8 workshops starting in the fall of 2018 and running through the summer of 2021. Each workshop will be offered twice a semester and administered by the research developers of this proposal, Dr. Bondra and Ms. Brewer. The topics for the workshops will be focused on developing leadership, success and innovativeness based on Dr. Bondra and Ms. Brewer's practical experience and expertise in these areas. Dr. Bondra and Ms. Brewer believe that these 8 workshops collectively cover the knowledge, skills and abilities that will lead to a higher level of leadership, success and innovativeness for participants. Because of this, participation in the workshops is a mandatory requirement for students in control group B. Measurement of participation in workshops is by attendance. If a participant does not attend a workshop, they will be removed from the study.

Workshop topics and descriptions include:

1. Leadership: In order to lead a group/company, one must be comfortable with being in charge. This includes making decisions, delegating work to others, and ensuring that the project/work/tasks are completed on time and to appropriate standards.

For this workshop, the students will get in groups of 5-10 and pick a 'leader'. That leader will be responsible for managing the group to complete a small project of building a farm out of Play-Doh in 20 minutes. With the small timeframe, the leader will have to delegate responsibilities to the team to ensure everything is completed in time. Once complete, the rest of the team can provide feedback. Teams and leaders will then change so everyone gets a chance to be a leader. Teams will rotate so the group doesn't get in a rhythm and auto-execute the exercise.

2. Confrontation: In a leadership role and as an IT professional, it's inevitable to have to deal with confrontation. Being familiar with common types of workplace confrontation and practicing how to deal with these situations will help students prepare for leadership roles and career success.

Students will split in groups of 5-10 and review various scenarios of how to handle different employee issues. Situations include employees not getting along, harassment and underperformance. A mock situation will be read to the group and they'll discuss ways to handle the situation.

3. Public speaking: People are assessed not only on their knowledge of a topic they're discussing/presenting but also on the way they communicate said information. If someone is not a good communicator, their message will be lost, misinterpreted or ignored by the intended recipient.

For this workshop, each student will put together a 5 minute presentation using Microsoft PowerPoint. Presentation topics will be simple, such as how to cook cupcakes, tie your shoe, brush your teeth, etc. Students will get to pick whatever topic they want; the focus is on their communication of something they're proficient in, this way they can focus on the delivery of their presentation and not researching it. The PowerPoint presentation should be short and simple. Bullet points should be used to jog their memory, sentences should not be written out. A presentation is not meant for reading to the audience, it's for you to teach them using your own words. When giving the presentation, students shouldn't talk with their hands or use notecards. They should take their time so they aren't saying 'um', 'like', 'you know', etc. during their presentation. Students will receive feedback on their presentation and public

speaking skills.

4. Problem solving: Leaders are continually presented with problems and rarely given possible solutions. As a result, leaders need to be good problem solvers which often times requires creative thinking.

Students will get into groups of 5-10 and will be given various problems to solve. Sample problems include:

- 1.) Needing more office supplies but not having any budget to purchase more.
- 2.) Equipment in upstairs gym makes the 1st floor ceiling shake when people are on the treadmill.
- 3.) Team members need to work over the weekend to upgrade production systems but overtime is not permitted.

Discussing issues and possible solutions with the group will help students develop creative thinking and problem solving skills. It will also teach them that it's okay to ask others for their opinion/input as different people might have a helpful perspective.

5. Cultural development: Team attitude is a reflection of their management. In the competitive IT business, companies try to attract employees with positive work cultures. Alternatively, company culture could be the reason someone doesn't want to work with/for a certain company/group. As a leader, it's important to be situationally aware of your team's behavior and their perception of your group. Leaders should lead by example not a 'do as I say not as I do' mentality. This workshop will review positive and negative leadership qualities and their effects on the staff and the culture that result from it.
6. Innovation: Some people are creative thinkers that like to push boundaries and think outside the box, others are not. To explore the innovative thought process, students will get into groups of 5-10 and will brainstorm on innovative ideas. Promoting creative thinking and positive feedback will possibly help them create/design new things.
7. Negotiation: As a leader, many decisions you make (such as conflict resolution, problem solving, deal management, etc.) will involve negotiation. It's imperative to understand proper negotiation concepts and techniques. Practicing this will help students become more comfortable with it.

For this workshop, students will be split into groups of 4. Each group is given a negotiation topic (such as buying a car) and each individual will be given a piece of paper with what their goal is to get out of this negotiation. The team will have a discussion and work through a negotiation. Afterwards they'll discuss who was able to achieve their goals and what strategies were used to obtain them. Discussing how others think can help enlighten students to be better negotiators.

8. Managing to different levels of the organization: As a leader and IT professional, you'll have to work with all levels of the organization. Communication across different levels needs to be tailored to the specific audience. This workshop will ask participants to develop communications for specific topics for the CEO, peers and subordinates.

One workshop will be held each semester so two workshops will be completed each year. At the end of a 4 year degree, participants will have completed all the workshops. In case a student is graduating early and will complete their undergraduate degree in 3.5 years instead of 4, the 8th workshop will also be offered during the first semester of their 4th (senior) year.

Each workshop will be held twice during the semester. Participants in Control Group B only have to attend the workshop once and can choose which one they attend. Since attendance is mandatory to remain in the study, students will be encouraged to attend the first workshop if possible. Attendance will be taken at the beginning of the workshop and will remain open for 15 minutes. If a student arrives after that, they won't receive participation credit for that workshop.

METHODOLOGY

Our measurement instrument of leadership, success and innovation will be a survey administered four times with both control groups (A and B) via email 1) immediately after graduation 2) one year after graduation, 3) five years of after graduation and 4) ten years after graduation. The survey will be emailed to the individuals personal email address, which will be obtained before they graduate and ongoing responses will contain indications of change email address for participants.

Data Gathering 1 – immediately after graduation

Survey sent to participants when they graduate:

- 1.) What is your personal (not @edu) email address? (this will not be used for any other purpose than to send future surveys for this study)
- 2.) What is your graduating GPA?
- 3.) Do you have a job/will you be starting a job once you leave GMU? (Yes or No)
 - a. If yes, who are you working for?

Answer question 4- 6 only if you participated in the workshop part of this study.

- 4.) What was your favorite workshop and why?
- 5.) What was your least favorite workshop and why?
- 6.) Do you have any recommendations for new workshops that you think would be beneficial?

Data Gathering Surveys 2 through 4 – One year, five years and ten years after graduation

Survey Questionnaire

1. What company do you work for?
2. What is your official job title?
3. What is your annual income?
4. How many people report to you?
5. What new ideas/concepts/products are you formulating?

Evaluation of the responses will be done by the researchers who will determine on a scale of one to five the following variables:

- 1) Leadership level – measured on a scale 1 to 5, 5 being the highest, based off of responses to questions 1, 2 and 4
- 2) Success level – measured on a scale 1 to 5, 5 being the highest, based off of responses to questions 1, 2, 3, and 4
- 3) Innovation Level – measured on a scale 1 to 5, 5 being the highest, based off of responses to questions 2 and 5

ANALYSIS

Simple regression analysis will be used to determine if there is a direct correlation between the college students participation in the workshops and the leadership level, level of success, and innovation level the student has achieved post-graduation. Simple regression analysis will predict, based on the resulting 'coefficient of correlation', between workshop participation and the success variables, leadership level, success level and innovation level.

In its simplest form:

$$X1 = Y$$

$$X2 = Y$$

X3 = Y

Y = Independent variable, participation in the workshops

X1 = dependent variable, leadership level (measured on a scale of 1 to 5, 5 being the highest level of leadership)

X2 = dependent variable, success level (measured on a scale of 1 to 5, 5 being the most successful)

X3 = dependent variable, innovation level (measured on a scale of 1 to 5, 5 being the most innovative)

Preliminary Analysis will be performed after each of the data response periods, year 1, year 5 and year 10. Additional analysis will be performed to correlate the timing of the study versus the results.

ANTICIPATED RESULTS

It is anticipated that control group B will have achieved a higher level of leadership and success at the five and ten year marks of their IT Career. The one year assessment will show no significant difference between workshop participants (control group B) and non-participants (control group A). The rationale behind why we think the one year mark will show little or no difference between the two control groups is that having attended the workshop curriculum will not automatically position you in leadership level because this certification isn't recognized throughout the IT industry enough to warrant additional compensation/job title.

We believe that leadership can be taught and cultivated, however, innovation cannot; people are either imaginative, creative or they aren't. But, there might be an indirect link between success and innovativeness; one must reach a certain level within a company to have the authority to be innovative. Entry level employees are not given the authority/freedom to create/implement new products. Moving up quicker in the company will allow innovative people to flourish, staying stagnant will not.

FUTURE RESEARCH

This research, will provide the building blocks for similar studies and will lead us to more expansive research geared to our current study.

Additional phases of our current research could be:

Phase 2

- A. Adding additional Universities to the study: If the hypothesis of this study is validated, there will be benefits to the colleges that offer this type of program. Universities with IT majors can use this unique program to help attract students. If additional Universities participate in this program, that will provide additional data to support the results of this analysis.
- B. Determining other relationships between variables from this study: An alternate hypothesis of leadership status/success is related to the amount of new product innovation. We believe there may be a secondary relationship between leadership/success and innovation levels.

Phase 3

- A. Adjusting the workshops to focus solely on innovation or success/leadership. Workshops will be geared to each of the control groups as opposed to today's collective workshops. Control group A would not take any workshops, control group B would take innovation workshops only and control group C would take success/leadership workshops only.
- B. Add other disciplines to study such as Management Information Systems, Computer Sciences and Business Management.

AUTHOR BIOGRAPHIES

Dr. Bondra is an Adjunct Professor in the Information Technology Department at George Mason University. He is also a Portfolio Director at Oracle Corporation specializing in the Department of Defense. He received his doctorate

degree from Cleveland State University in 1999. He has published a number of times including the best-selling book in 2004, 'The Wireless Frenzy, Projections and Predictions of a Wireless World Gone Mad'.

Ms. Brewer is a Principal Project Consultant for Oracle Corporation. She graduated from Christopher Newport University with a Bachelors of Science in Business Administration, minor in Psychology. She earned her Masters in Business Administration degree with a concentration in Human Resources from Strayer University. Ms. Brewer previously held a Professional in Human Resources (PHR) certification and in 2016 obtained her Project Management Professional (PMP) certification.

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Three Visual Strategies To Increase Success Of Diverse Learners

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ABSTRACT

This paper explores teaching and learning applications at the intersection between Universal Design for Learning, Assistive Technology, and mainstream educational technology. Informed by the SETT framework in which the technology choice is informed by student, environment, and task (Dell, Newton, & Petroff, 2017; Zabala, 2005), this paper is designed for a learner-profile consistent with learners who need concrete and visual approaches to optimize receptive and expressive communication. The visual and interactive approaches shared here include Universal Design, graphic organizers, and comic strip creations, and may appeal to teachers of students on the autism spectrum as well as others who are responsive to visual supports.

While it is not possible to predict the exact nature of the environment and tasks at hand for these students, the paper leaves those decisions in the hands of the readers. Approaches and suggestions shared here reflect practitioner experience, findings from the literature, and discoveries from a 2017 CSUN Assistive Technology Applications certification program. Also included is data from a 2016 course, in which a small number of diverse students reinforced the concept that UDL approaches increased their engagement and success.

Three Visual Strategies to Increase Success of Diverse Learners

Assistive Technology (AT) is increasingly evolving in tandem – if not in concert and in overlap – with its more mainstream counterpart, educational technology. Although initially dedicated devices, DynaVox, GoTalk Now, Proloquo, Co-Writer, and many other AT leaders have recently developed products optimized for iPads, Smart phones, Chrome books and other mobile/mainstream devices. Many such devices successfully use visual approaches to augment teaching, learning, and communication. Similarly, vendors and educators who initially developed visual applications for general use have found their products and approaches to be popular among teachers and learners with special needs (Culbert, Flood, Windler, & Work, 1998).

This paper explores applications at the intersection between Universal Design for Learning, Assistive Technology, and mainstream educational technology. Technology use considers the SETT framework developed by Zabala in 1995, in which the technology choice is informed by student, environment, and task (Dell, Newton, & Petroff, 2017), this paper emphasizes approaches that specifically support visual learners. While it is not possible to predict the exact nature of the environment and tasks at hand, the paper merges discoveries from a 2017 CSUN Assistive Technology Applications certification program with data and observations from a 2016 course in which diverse students reported on the rival merits of various instructional approaches to increase student success.

LITERATURE REVIEW

According to the 2010 U.S. Census, 53.9 million school-aged children (age 5-17) live in the United States. Of those children, 2.8 million (5.2%) were reported to have a disability. The figures below demonstrate that a large proportion experience cognitive difficulties (Figure 1). With few exceptions – states enroll 85% or more of these children in public schools (Figure 2).

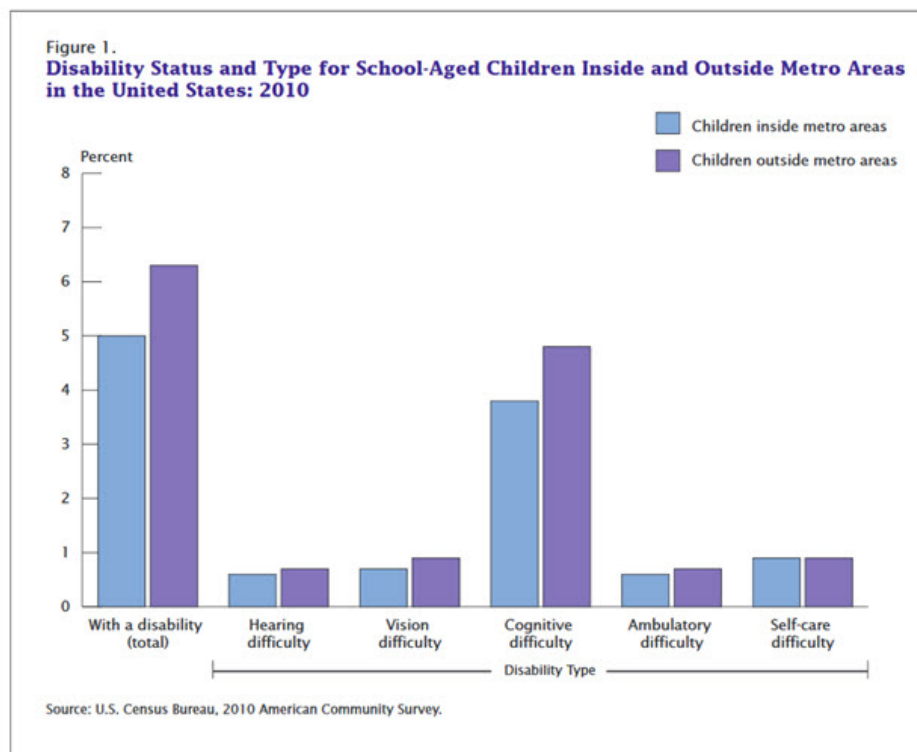


Figure 1: Disability status and type for school-aged children inside and outside metro areas in the United States: 2010

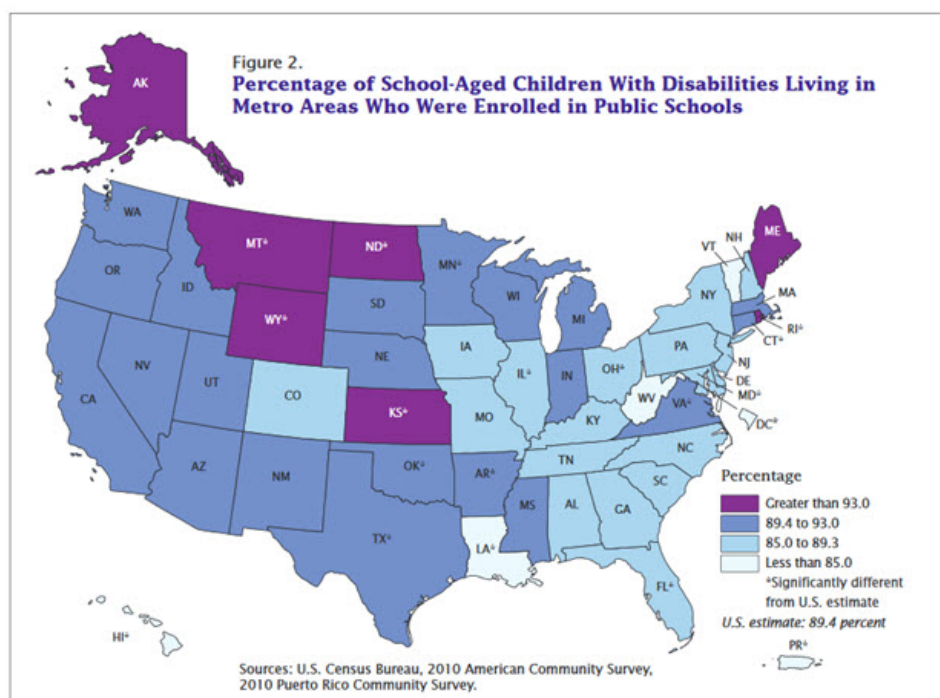


Figure 2: Percentage of school-aged children with disabilities living in metro areas who were enrolled in public schools

Diverse learners in schools include people with wide-ranging strengths and challenges in the areas of cognitive, sensory, motor, and social-emotional comprehension. With access to content viewed as a continuum, other factors not considered in the realm of disability also impact cognition and learning. For example, language learners who are trying to grasp content in a non-native language may have challenges. The emphasis of this paper is on supports that supplement linguistic and text-based content. The three approaches suggested here have been endorsed in the literature. They include: (1) Universal design for learning (Rose & Meyer, 2002); (2) graphic organizers (Singleton & Filce, 2015), and (3) comic creation (Suwastomo, 2016).

Universal Design for Learning (UDL) emphasizes the provision of multiple means of engagement, representation, and action and expression (Center for Applied Special Technology, 2017; Rose & Meyer, 2005) with findings that indicate this general approach supports a wide range of learners and can significantly reduce barriers for learners with special needs. “In practice, universal design and AT often work in concert to achieve optimal and practical results (Hitchcock & Stahl, 2003). This “modern era of assistive technology coincides with the technology revolution that began with the first computers” (Edyburn, 2015, p. 1).

PURPOSE OF THE STUDY

As these forces converge – Assistive Technology and Instructional Technology, universal design approaches, and inclusion of diverse learners in the mainstream classroom – the goal of this paper is to describe and explore uses of three technology-based approaches that offer support for a wide range of learners, particularly those with autism spectrum disorders (ASD) and those for whom English is a second language.

METHODS

The application and use of the three visual approaches described involves observations based on the author’s own role as instructor of educational technology and autism courses at Nevada State College from 2014 to 2017. Also included is survey data collected in the context of a teacher preparation class held at Dooley Elementary School in Henderson, Nevada. The course was supplemented with extensive online content and pre-service teachers learned strategies for incorporating technology into the teaching and learning process. The students are representative of a highly diverse population in which over 50% of students are Hispanic, Asian, or African American. Many students represent the first generation of their family to go to college, and over 50% are balancing parental responsibilities and/or full time employment.

Graphic organizers and comic strip creation tools can be said to meet the criteria for Assistive Technology Devices. However, a teacher’s construction of UDL approaches to instructional design and teaching seems to be more in keeping with the definition of an Assistive Technology Service. This interpretation is based on Public Law, 100-407, the Technology-related Assistance to Individuals with Disabilities Act of 1988 and amendments (Center on Disabilities, CSUN, 2013).

The three educational or AT tools and services explored in this paper will begin with a discussion of Universal Design for Learning, followed by graphic organizers and comic strip creations.

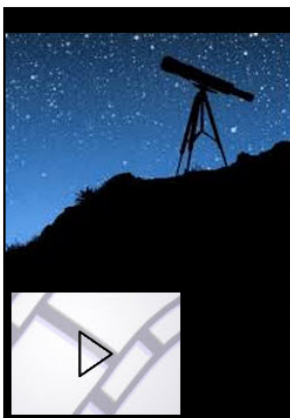
Universal Design for Learning

Students of EDUC 409 (Technology Applications in Education) were provided with the visual support of a UDL-designed course to support, enrich, and extend their face-to-face learning experiences. Previous studies have shown an LMS such as Moodle, Blackboard, or Canvas, can be successfully used to provide students with UDL benefits (Bryans-Bongey, Hughes, & Scherer, 2014). In keeping with this strategy, the course described in this paper (and the associated LMS site in Canvas) was designed to use varied design approaches consistent with UDL. Each module included an overview, list of learning objectives and activities, course content, and an activity checklist. The module organization may be seen in Figure 3 below.

Module 2: 9/8-9/20				✓	+	⚙
Module 2 Overview				✓		⚙
Module 2: Learning Objectives and Activities				✓		⚙
Discussion: Communicating Goals, Tracking Student...	Sep 13	20 pts		✓		⚙
Observation Reflection Form - 9/10	Sep 13	10 pts		✓		⚙
Dooley Session-9/10 (for timeliness and participation)	Sep 10	10 pts		✓		⚙
Observation Reflection Form - 9/17	Sep 20	10 pts		✓		⚙
Dooley Session-9/17 (for timeliness and participation)	Sep 17	10 pts		✓		⚙
Backwards Lesson Plan	Sep 20	25 pts		✓		⚙
Activity Checklist for Module 2				✓		⚙
Module 3: 9/21-10/4				✓	+	⚙
Module 3: Overview				✓		⚙
Module 3: Learning Objectives and Activities				✓		⚙
Discussion: Establishing Classroom Rules and Proce...		20 pts		✓		⚙
Dooley Session-9/24 (for timeliness and participation)	Sep 24	10 pts		✓		⚙
Observation Reflection - 9/24	Sep 27	10 pts		✓		⚙
Dream Classroom Floorplan Assignment	Oct 4	25 pts		✓		⚙
Activity Checklist for Module 3				✓		⚙

Figure 3. Online modules were designed in a consistent and predictable manner

Module 2 Overview



Welcome to Module 2 of *Technology Applications in Education*!

Over this second two-week module, we can start to get into the essence of the class. We are off to a solid and promising start to the semester. All of you have completed your first observation of a technology-rich classroom and learning activity. You should also now have a copy of the course textbook. This week's assigned reading of Chapter 2 will inform your in-class observation, and will allow you to consider and explore research-based approaches involving the use of technology to establish/communicate learning goals, track student progress, and celebrate success.

We will be weaving in a standard discussion assignment that will span the two-week module and allow you to connect theory with practice.

You will be challenged to draw from your prior knowledge, course content, and your in-class observations as you complete a "Backwards Lesson Plan" that describes learning objectives, strategies, application, and assessments associated with one or more learning activity you observed in an actual classroom taught by another teacher.

This should be a thought-provoking and engaging two weeks! As always, please [contact me via email if you have questions or comments](#). I noticed that some of you did not complete your observation reflection form. Please contact me if you have questions on that because these will be a standard assignment and you will not want to lose those points. Thanks, and see you in Room 33 on Thursday at 9:30! :)

Click the arrow if you'd like to hear the audio overview for Module 2.

Figure 4: Module 2 Overview

While the overview sought to provide students with an orientation to the current content, it also provided resources for follow-up and outreach. The learning objectives shown in Figure 5, promote student time on task and an accessible way to identify needs and stay accountable.

Module 2: Learning Objectives and Activities



Course-Level Outcomes:

- Determine the purpose and impact of using technology in the classroom.
- Study best practices that change the way educators teach and students learn.
- Integrate technology tools into daily instruction.

Objectives: By the end of this module, students will:

- Demonstrate an understanding of key instructional design approaches and technology-rich strategies for implementing them.
- Observe, identify and describe a best practice use of educational technology.
- Reflect upon strategies you've read about and observed
- Develop and share one creative strategy using technology to communicate learning goals, monitor student progress, and/or celebrate success.

Week 2 and 3 Activities

- **Read Chapter 2 (p. 27-37)** of *Enhancing the Art and Science of Teaching with Technology*. The chapter focuses on theoretical and practical aspects using technology to communicate, track, and celebrate student learning.
- **Contribute to In-Class Discussions and Complete Weekly Observation Forms**
- **Participate in a timely and active manner during weekly observation sessions.**
- **Respond to the Discussion Assignment (Initial post due Sunday, 9/13. Responses to others due Sunday, 9/20).**
- **Complete the Assignment** - Based on an observed classroom use of technology, create and submit your Backwards Lesson Plan (**due Sunday, 9/20**).

Figure 5: Learning Objectives and Activities

Advantages of this web enhanced and universal design approach to a primarily face-to-face class include the ability for students to access content before and after the associated class sessions. Interactive content can be posted, played, revisited, and replayed. The objectives and overview provided a cognitive map and also provided practical guidance as to days, dates, and events. All materials, ranging from the syllabus to course content, were posted in the online site. As shown in Figure 6, students were able to check up on their progress through the provision of an “Activity Checklist” for each module.

Activity Checklist for Module 2

Did You?...



- **Read Chapter 2 (p. 27-37)** of *Enhancing the Art and Science of Teaching with Technology*. The chapter focuses on theoretical and practical aspects using technology to communicate, track, and celebrate student learning.
- **Contribute to In-Class Discussions and Complete Weekly Observation Forms (2 for this module)**
- **Participate in a timely and active manner during weekly observation sessions**
- **Respond to the Discussion Assignment**
- **Complete the Assignment** - Based on an observed classroom use of technology, create and submit your Backwards Lesson Plan.

Figure 6: Activity Checklist

Grading rubrics for each assignment, as well as checklists, peer review opportunities, and assignments with iterative stages (involving feedback from the instructor) provided additional supports. In the area of content, every effort was made to select multiple means through which to represent information, for example, video, audio, text and

interaction/discussion were frequently used in combination when presenting the same content. Student engagement was also promoted and students had frequent opportunities to choose from two or three assignment or project options.

Graphic Organizers

Graphic organizers enable the teacher and the learner to highlight ideas and relationships in a visual and constructivist manner. There are many uses and types of graphic organizers, and they can be easily created by the teacher to support discussion, planning, and independent/individual success as shown in the organizer in Figure 7 which was assigned after reading and presentation, but before the individual broke out into discussion groups and the preparation of a script for a talking avatar to describe “Schools of the Future”.

In a study endorsed by the U.S. Department of Education, it was shown that graphic organizers promote student comprehension of complex and expository text and concepts. The study included 107 special education and general education teachers working at the K-8 level, and found that 90.2% of respondents found their instruction was improved through the use of graphic organizers (Culbert, et al., 1998).

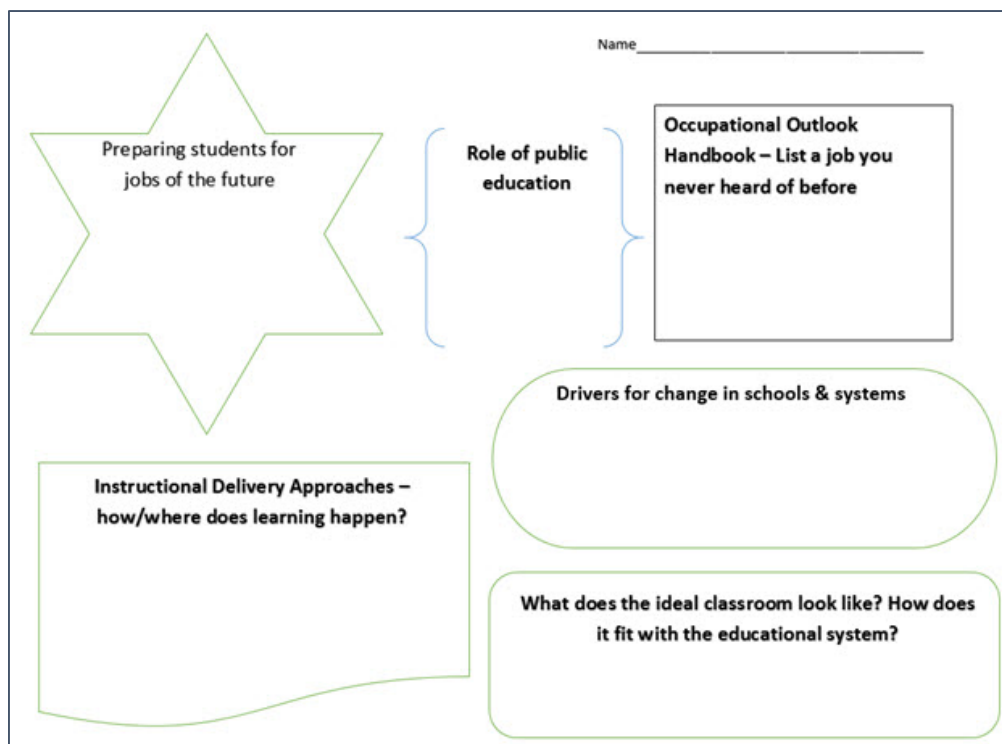


Figure 7: Graphic organizer used for independent processing after an in-class presentation/research-session and before a discussion/ activity.

Teachers frequently use graphic organizers because they compress and focus information and show the “interrelationships among parts as well as the relationship of the parts to the whole... They help students view information on both holistic and detailed levels” (Barkley, Major, & Cross, 2014, p. 261). Figure 8 below shows a graphic organizer used to map the parts of a story.

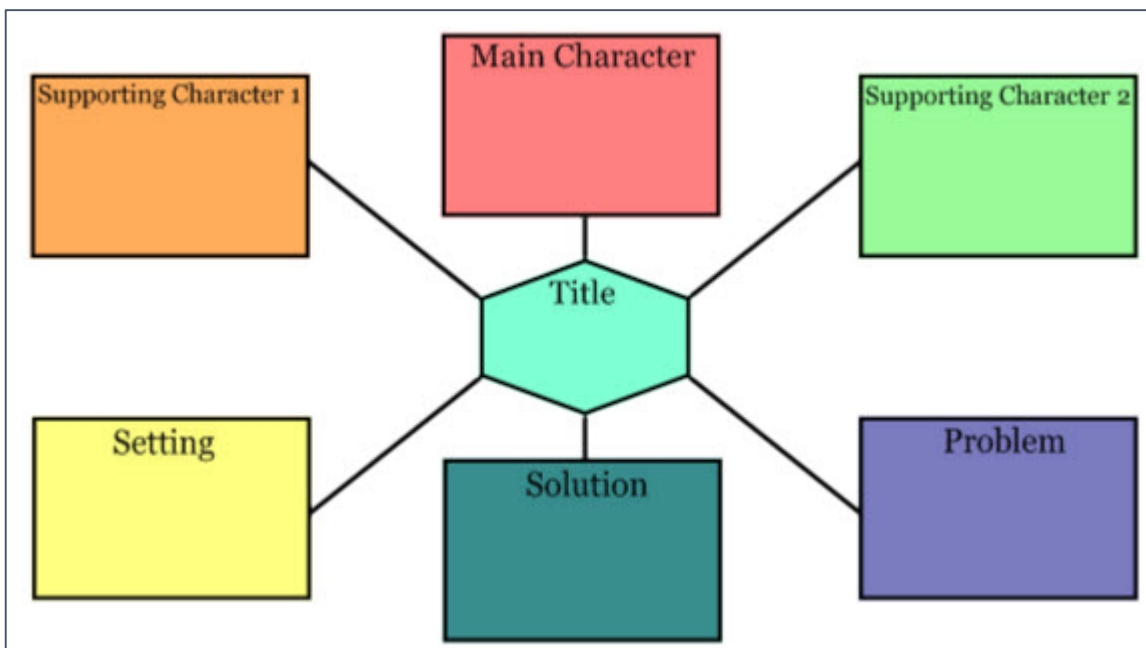


Figure 8: This graphic organizer is designed to map parts of a story. For younger grades, this design may be simplified. Pictures may also be added to provide further visual guidance.

In the classroom, graphic organizers guide students to specific or critical questions they need to address, thus helping them organize their thinking and construct solutions and hypotheses. Graphic organizers also support collaboration in settings involving large-group participation such as in the use of a SMART Board activity shown in Figure 9.

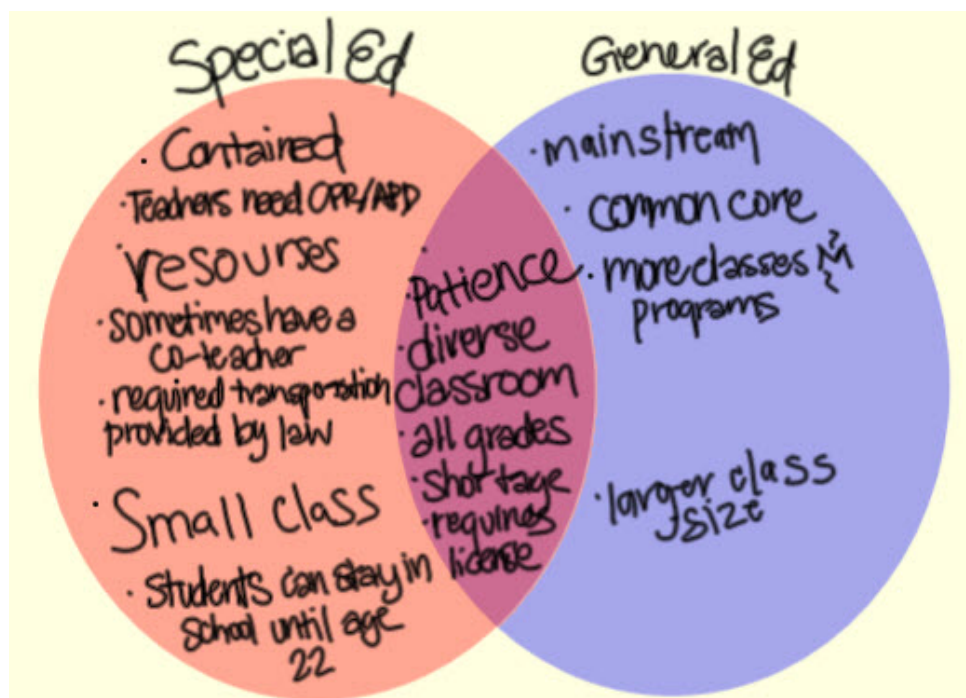


Figure 9: This Venn diagram represents a SMART Board activity in which students contributed ideas to the question of similarities and differences between special education and general education classrooms.

In addition to the above-mentioned applications, these visual devices may be used by teachers or learners to organize or express concepts in a summative way. Figure 10 below shows part of a graphic organizer that was used by a pre-service teacher to describe interrelationships between teaching, literacy, and technology in the 21st century.

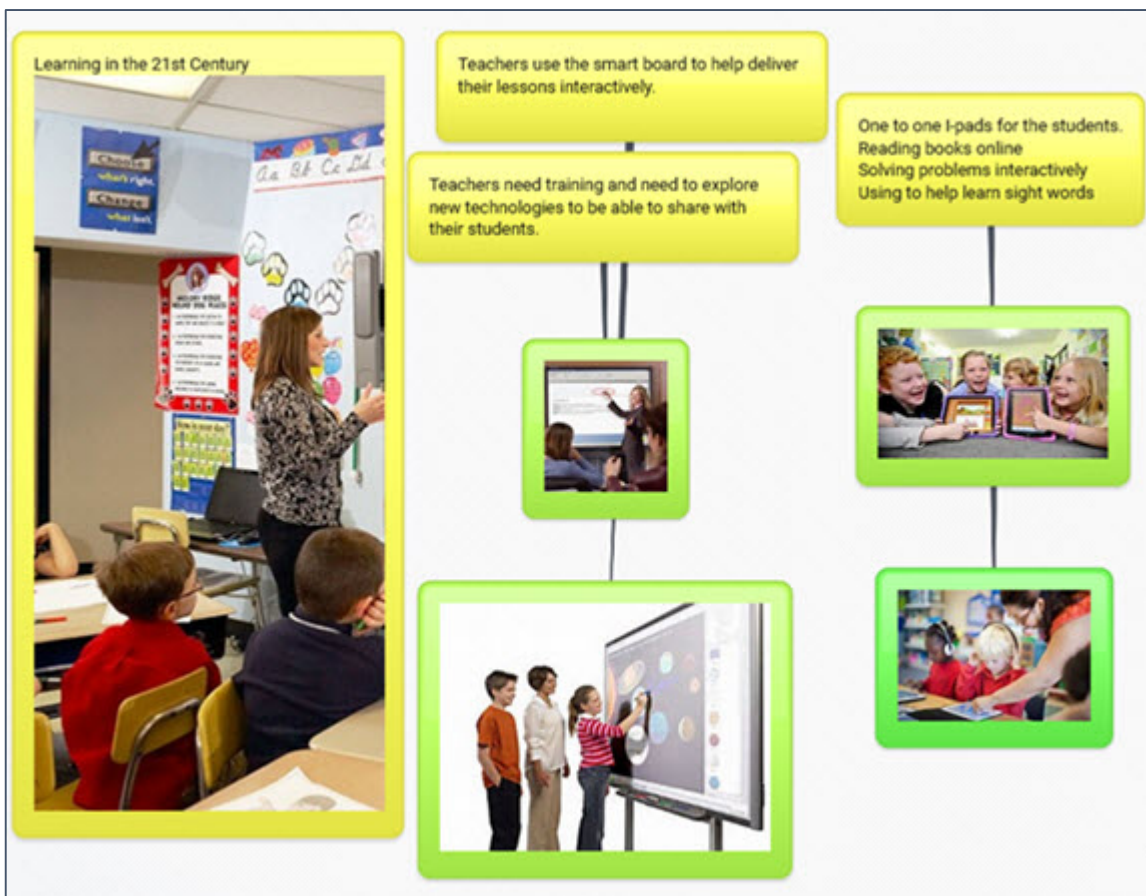


Figure 10: Graphic organizer created by student as part of an assignment to generate a visual overview on the topic of technology and literacy.

Comic Strip Creation Tools or Storyboards

Comic Strips and storyboards are also visual options to support student engagement and constructivist approaches with great value for students with special needs or those who benefit from highly visual strategies. These can be simple, paper-based journals or storyboard frame-printouts, with varying levels of labeling or captions. In the online realm there are many digital tools that allow the user to create professional looking comics and storylines. The comics can be used to promote positive behavioral goals, as described by Carol Gray and her use of comic strip conversations (Glaeser, Pierson, & Fritschmann, 2003). Comic strips can have relevance for special educators as well as teachers supporting diverse learners in the general education setting.

Comic strips and storyboards can also be used to express content knowledge. Teachers can establish assignments in which students are asked to use free online tools such as *Pixton*, *Creately*, or *Storyboard That* to express their own learning or creative ideas. At the college level, students who were asked to create a comic as an assignment universally agreed that the creation of comic strips helped make content both enjoyable and interesting.

As seen in Figure 11, teachers can also use them to introduce new content in a visual way or they can assign a storyboard/comic to their students. The goal of using these approaches is to promote student engagement and higher order thinking.

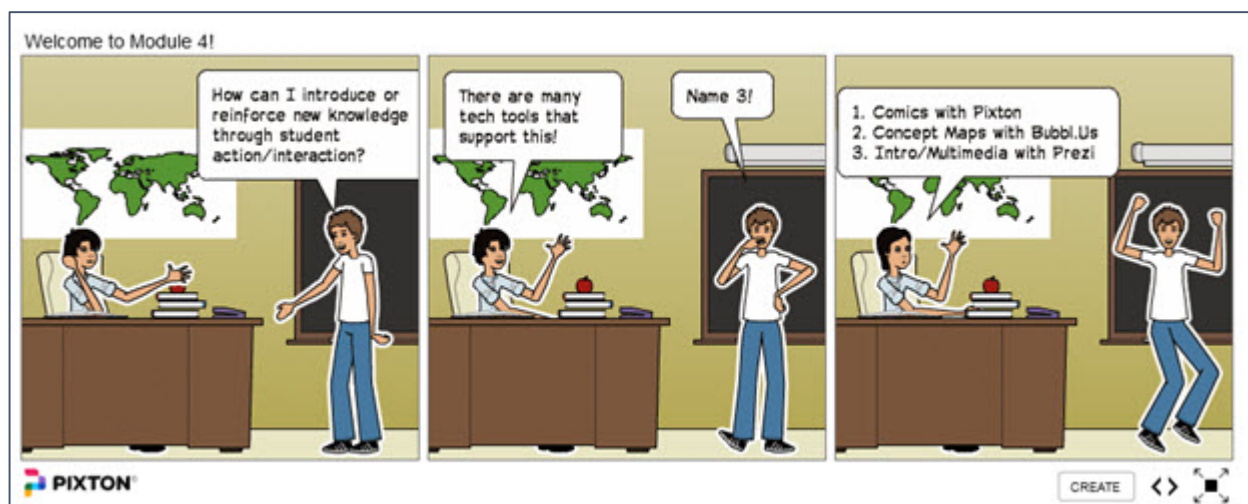


Figure 11: The author used this *Pixton* comic in an online class for pre-service teachers. It introduced a new learning module and content relating to brainstorming strategies for reinforcing new knowledge.

Both Figure 11 and Figure 12 show how the teacher can introduce new content via the engaging format of a comic. In Figure 12, a pre-service teacher and a student in the author's technology foundations course used *Storyboard That* to introduce a new concept to a group of first graders.

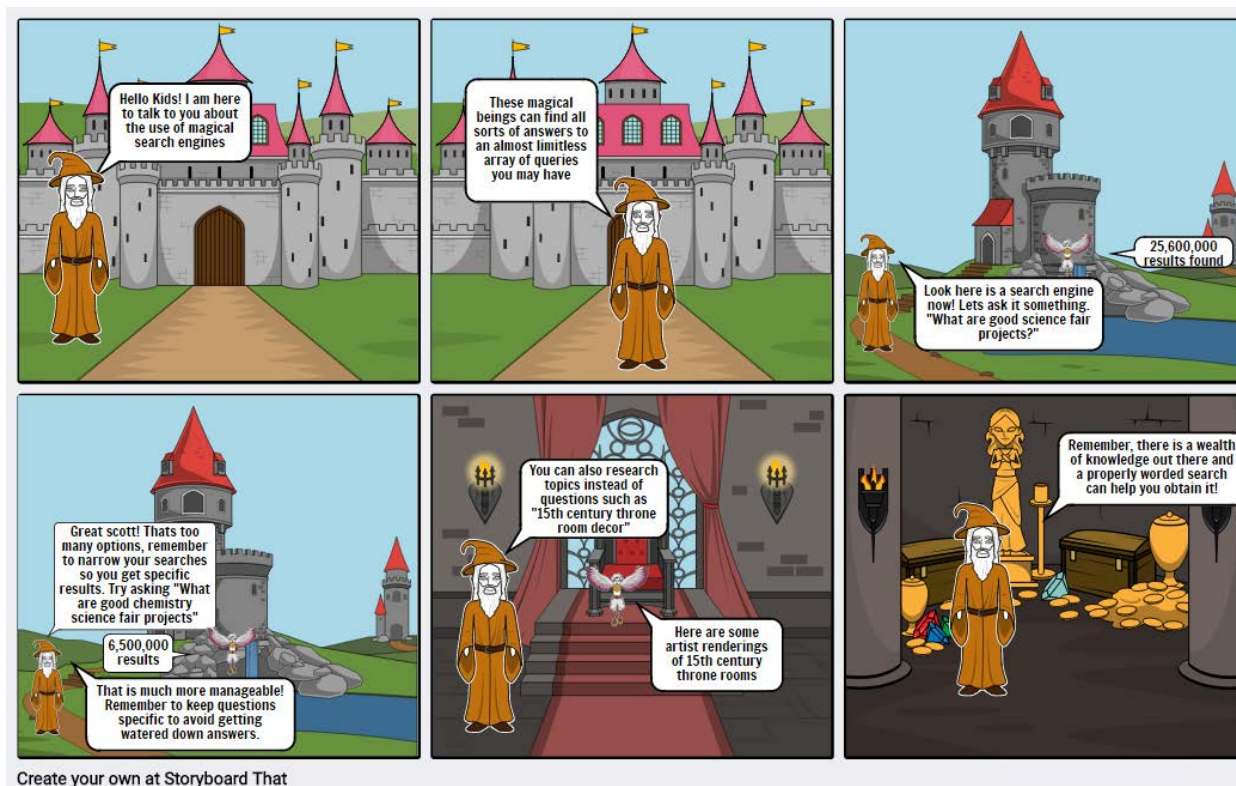


Figure 12: A pre-service teacher and student in my class on Foundations in Educational Technology created this comic to introduce young learners to the benefit of search engines.

In general, comic strips and storyboards have support in the literature as tools that can assist a wide range of diverse learners in the area of both receptive and expressive communication. The tools that support this work are readily

available and – as in the case of graphic organizers – comics and storyboards can be implemented with low tech or no tech approaches as well as through a variety of free tools on the Internet.

RESULTS

Based on information in the literature, feedback from students, and the author's experience and observations, many learners – including those on the autism spectrum – are responsive to visual approaches via both receptive and expressive modalities. Students have been highly responsive to the use of graphic organizers and comic strips from their perspectives as college students engaging in learning and also from the standpoint of pre-service teachers being asked to adopt these approaches with their own special education or general education students. This paper has described and demonstrated three visual approaches that may be used in the context of AT services or devices to promote success among students with special needs. Ideally, teachers in general education settings can also adopt some of these ideas and approaches for the benefit of teaching and learning.

Future research will expand upon these findings further. However, when seeking to identify approaches diverse students find helpful in their own learning, the descriptive questions and student endorsement of multiple means of engagement, representation, and action and expression provided clear support for UDL approaches (CAST, 2017). As seen in Figure 13, this preference for UDL was demonstrated by students without the potential bias of actually naming the UDL construct in the survey questions provided.

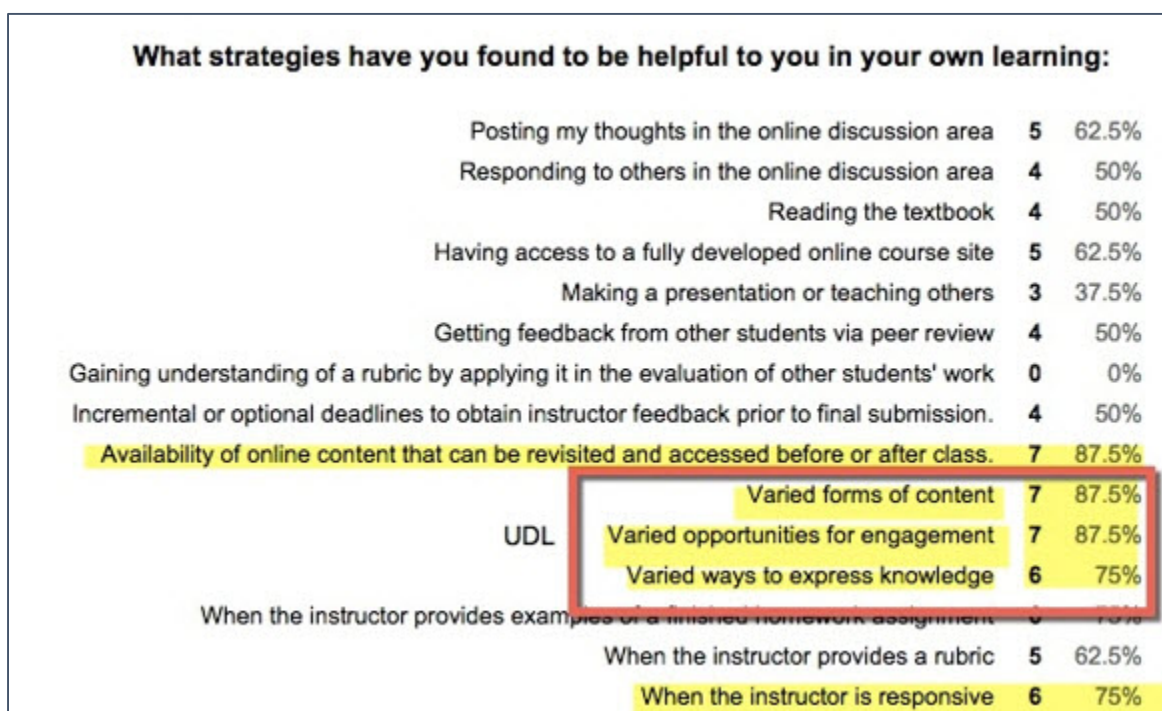


Figure 13: Without prompting as to the approach being used, students identified the usefulness of the three domains or strategies that comprise Universal Design for Learning (UDL).

CONCLUSIONS AND FUTURE STUDY

This paper described creative uses of these visual and supportive tools and services represented by graphic organizers, comic strips, and UDL. It also explored their advantages through the literature and shared initial responses from students in the Teacher Preparation Program at Nevada State College. In so doing, this case study forms the foundation for future and ongoing implementation. With the goal being to quantify the benefits identified here, this project suggests the need for further study and a systematic process to measure ways UDL, graphic organizers, and comic strip creations can benefit students as (1) a form of assistive technology, and (2) as a means of enriching general

education classrooms with visual, engaging, and constructivist approaches to teaching and learning.

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Institutional Structures And Financial Market Development In Africa

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ABSTRACT

In recent times, researchers have highlighted the importance of the existence of strong institutional structures and their effects on financial markets owing to the characterizing features of financial contracts (Hooper et al., 2009). With this, there should not only be the existence of appropriate legal structures, but also sound institutional structures to ensure an adequate enforcement of the rights and constraints of parties involved in contracts. Without the presence of these sound institutional structures, contracts will probably become unworkable, in that problems such as moral hazard and adverse selection arise from imperfect information (Law & Azman-Saini, 2012; Chinn, 2006; Capasso 2004; Hooper et al., 2009). The level and nature of imperfect information and information flow among agents are imperative for resource allocation (Capasso, 2004). Corollary to this, countries with better-developed institutional structures experience well-developed financial intermediaries that help ensure a free-flow of information among agents involved in contracts. Moreover, sound institutions are required in every economy to serve as a pathway upon which financial markets channel resources to finance productive ventures (Mishkin, 2009; Claessens & Laeven, 2003; Chinn & Ito, 2006). Thus, the relationship between institutional structures and financial market development is imperative.

A structured analysis of the role of institutional structures in the development of financial market development stems from the works of Acemoglu et al., (2004), La Porta et al., (1998), and Rajan and Zingales (1998; 2003), which show significant positive association between financial market development and the quality of the institutional environment. More recently, the role of institutional structures in financial market development has been examined (see Law & Azman-Saini, 2012; Hooper et al., 2009; Demetriades & Fielding 2009; Djankov et al., 2007; Roe & Siegel, 2008; Tressel & Detragiache 2008). Evidence from advanced countries reveals that, financial market development tends to be associated with soundness of institutional structures in economies (see Roe & Siegel, 2009; Rajan & Zingales, 2003; Acemoglu & Johnson, 2005). In Africa, however, the contribution of institutional structures to financial market development has not been adequately dealt with. Most of the cross-country studies in the context of Africa that come close to examining how institutional structures influence financial market development tend to be biased towards capital market variables (see Anayiotos & Toroyan, 2009; Demetriades et al., 2009) while abstracting from the stock market performance variables. This thus, tends not to offer an entire state of the contribution of institutional structures to financial market development in Africa.

Our paper argues that the capital market in most African countries is in their developmental stage (Ngare et al., 2014; Okpara, 2010; Berglof & Claessens, 2003) and for that matter, employing capital market variables as surrogate measures for financial market development in studies of this nature tends to offer an unbalanced view on institutional structures-financial market development nexus. In addition, not all African countries have a capital market and therefore, complete and quality panel datasets from the capital market might not be available for meaningful analysis on how institutional structures influence financial market development in Africa.

Thus, our paper contributes to the extant literature by using other financial market development variables that have not before been exploited to analysing the role of institutional structures on financial market development in the context of Africa. Since the extant literature suggests that most developing countries, in particular, African countries, development progress is associated with the banking system, which serves as a conduit by which savers make funds available to investors (Kawai & Prasad, 2011; Law & Azman-Saini, 2012), our empirical technique involved regressing two of the most important financial market development indicators in Africa- ease of access to loans and venture capital availability- on institutional structures conditioned on indicators recommended in the extant related literature.

Based on the dynamic panel system generalised method of moment estimations, our empirical results highlight that the presence of institutional structures enhances the ease of access to loans by individuals in our sampled economies. In addition, we do find a significant positive relationship between institutional structures and venture capital availability in our sampled African countries. These results suggest that with improvement of institutional structures, African countries can witness a further development in their financial markets. As a result, putting policies in place to enhance the quality of institutional structures should result in significant gains. Implementing these policies will help these economies to enhance their financial markets. Thus, policy makers in African countries should put implementable policies in place to ensure sound institutional structures to realize the development of their financial markets.

Opportunities For Transforming Educational Research Through Professional Development

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ABSTRACT

Why am I still teaching? What gives me greatest satisfaction as a teacher? What drives me to engage my students in transformative learning? What is the source of my values and vision? Why am I still dissatisfied with formal education systems, and why do I continue to struggle to transform those that lie within my reach?

These are profound questions whose answers go to the heart of our identity as a person and professional educator. As transformative educators we cannot separate the two, and am forever engaged in contemplation of answers that evolve over time.

The central thesis in this professional development inquiry is, inspired by Parker Palmer, to seek answers to the question of who is the self who teaches?

In providing a narrative account of his own transformative learning journey, Steven Witt offers to shepherd us along our own unique and richly rewarding journeys leading to self-actualization. Not simply to increase our knowledge of contemporary educational theories and teaching methods, but to engage in a process of transformative learning in which we ask and seek answers to difficult but profound questions. How can I as a teacher help make the world a better place for future generations? What is my higher purpose as a teacher? What is my commitment to making a difference to the lives of my students?

Throughout this narrative inquiry presentation the teacher/researcher presents a pedagogy of hope that inspires us to seek our higher purpose as teachers committed to preparing future citizens to live meaningful and compassionate lives in a complex, contested and rapidly changing world.

Keywords: Transformative, professional development, inquiry, identity

Teachers' Involvement In South African Correctional Schools For Social Change And Juveniles' Wellness

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ABSTRACT

The study focused on the wellness and educational success of juveniles in correctional centre schools in South Africa. The article covers only four provinces in South Africa where the study was conducted. The study is located within an interpretive paradigm and a qualitative method was employed. Furthermore the lens for this study was wellness theory and an African philosophy of Ubuntu. The sample was purposive and only male juvenile offender learners were targeted, whereas teachers were of mixed gender. Data were collected through interviews, questionnaires with open ended questions, narratives and observations. Findings revealed that teachers need the relevant training for correctional schools and need to be equipped with counselling skills so that they can be in a position to address diverse needs of learners. The correctional schools varied in terms of hours spent at school and the availability of Learner Teacher support materials. Some teachers' qualifications were not relevant, other classes were taught by inmates. Juveniles expressed the need for career guidance and a focus on skills that will enable them to be employed or create employment. The study proposes relevant teacher training for correctional schools and mobilization of more subjects, skills and availability of LTSM.

Keywords: Juvenile offender learners; correctional school; wellness; Ubuntu; teacher training

INTRODUCTION

Programmes offered by the Department of Correctional Services are Adult Basic Education and Training (ABET) Level 1 – 4 to prepare offenders for Grade 10 -12. Higher Education and Training, vocational skills, computer skills and basic occupational skills are also offered (Department of Correctional Services, 2012). According to the Department of Correctional Services, these programmes are designed to equip prisoners with the necessary skills that will facilitate effective living in the society after release and for social reintegration.

As much as compulsory education has been applauded as a positive move in restructuring the rehabilitation programmes in South African correctional centres, it is crucial that researchers should explore how this move will benefit the offenders and the wider society. Education will improve the lives of offenders and there will be social change in terms of how the society perceives ex-offenders. This can be done by carrying out a study that will identify strategies that have the potential of making correctional education and its objectives worthwhile. Partnerships between correctional schools and Non Governmental Organisations and relevant stakeholders that are keen in rehabilitation processes may be of help. Target may be on supporting teachers in Correctional schools on developing the offender learner in all wellness dimensions. Furthermore, there is a need to go an extra mile to investigate how South African correctional schools are run so that there can be relevant support to teachers. It is also vital to explore how teachers enhance the wellness dimensions of juvenile offenders. The attainment of wellness dimensions in an individual is crucial as it enables him or her to recognise the importance of interdependence, working together and creating harmony in his or her society (Schaffer, 2000).

In South Africa, education in correctional centres has become compulsory for all offenders who have attained education up to Grade 9 until the age of 25 or ABET level four (Department of Correctional Services, 2012). There are challenges facing education in correctional services, which pose a threat to the success of the initiative of making it compulsory. According to Van Heerden (2012), most correctional centre schools lack skilled teachers, as well as

resources such as textbooks and internet access. The strict restrictions also make the availability of some resources impossible for security concerns. For example, a pair of scissors can be used as a weapon for stabbing each other by prisoners. Seemingly, some employees working in the Department of Correctional Services are not trained to deal with juveniles (Muntingh et al., 2012). For a successful educational programme to take place, there is need for a conducive environment, innovative programmes and better trained staff (Jovanic, 2011). If these are lacking, then the educational programme cannot be effective.

Rationale for the study

The number of children below the age of 18 who have committed crimes in South African prisons is alarming. The recent statistical record for juveniles was at 0,4% of 153 000 of the total population in prison (International Centre for Prison Studies, 2012). Former Correctional Services Minister, Sbu Ndebele asserts that South Africa has the highest population of prisoners in Africa (Mail and Guardian 11 February 2013). The current Minister of Justice and Correctional Services advocate Michael Masutha says offender education will be one of the focal areas that he pays attention to during his tenure (28 May 2014). This gives hope that education will receive more attention at correctional centres in South Africa. Hence, there was a need to conduct the current study and to find out if education in correctional centres is taken seriously in South Africa and how teachers are empowered to teach offenders for social change, rehabilitation and breaking the cycle of crime.

Problem Statement

Juvenile offenders entail children in conflict with the law and child offenders (Badenhorst, 2011; Zenzile, 2008). South Africa's incarceration rate remains the highest in Africa and in the world (Justice and Correctional Services, 2011). The National Offender Population Profile (2013) indicated that there are an average total of 152,641 inmates in correctional schools across the country in South Africa. Nearly a quarter (24.99%) of the sentenced offender population consists of juveniles. Juveniles, as young as 17 years of age, have committed serious crimes, abused substances, they have dropped out of school before reaching high school, and are functionally illiterate (National Offender Population Profile, 2013).

According to Millennium Development Goal (MDG), declaration signed by 189 countries (United Nations Development Group, 2003), internationally, all children of school-going age must achieve universal primary education, or must have completed primary education by 2015, including the literacy rate of 15-24 year-old (Nayyar, 2012; Higgins, 2013; South African Report MDG, 2013). Therefore, correctional centre education is not only a mechanism to development and growth but is also a means to the attainment of the MDGs and vision 2030 (Nayyar, 2012). The Constitution of the Republic of South Africa, Act 108 section 29 (1996) also point out that education is a fundamental right and it needs to be freely available to all learners. Thus, juvenile offenders have a right to basic education which is available to all learners (Department of Correctional Services, 2008).

According to Muntingh and Ballard (2012), academic programmes in the correctional centre offer benefits and opportunities to individual juvenile offenders. Currently in South Africa, juvenile offenders who like to be educated while behind bars do so through the Adult Education and Training (AET) Programme or via a variety of volunteer or non-profit organisations (NPOs) oriented towards literacy improvement (Pickard, 2012; Department of Correctional Services, 2008).

Regardless of the type or quality of education and training on offer in the correctional schools, juvenile offender learners face institutional and situational barriers imposed by their confinement (Costelloe & Langelid, 2011). There are barriers to learning that hamper the academic wellness of learners in correctional schools (Frances, 2010; Scurrah, 2010; Brazzell, *et al.*, 2009). Sadly, White Paper 6, Building an Inclusive Education and Training System is silent on the correctional education or juvenile offender learner in correctional schools. It only mentions that inclusion involves traditional schools supporting and include all learners, irrespective of their race, culture, health, barriers to learning and Special Needs (Department of Education, 2001).

Though the Department of Correctional Services is trying very hard to ensure that education is availed to offenders, it is however sad to realise that recidivism is still high. In 2012, it was reported that 80% of all offenders re-offend (Readucate, 2012). The recidivism trend is a sign that the rehabilitation programmes currently underway in South African prisons are not doing enough to ensure that ex-offenders stay out of crime. Offenders who attend school during incarceration often are rehabilitated and those who refuse to go to school re-offend (Vacca, 2004). Hence, the research questions that guided this study were as follows:

- How is the involvement of teachers in addressing the wellness of juvenile offenders in a correctional school?
- How competent are correctional centre teachers in enhancing the learners' wellness?

THEORETICAL FRAMEWORK

The study used Hettler's (2000) wellness model as the lens. The model has enabled the researcher to study the teachers preparedness in correctional centre schools so that their involvement is relevant in enhancing the learners' wellness. According to Greenburg (1985) and Hoeger (1989), physical wellness focuses on the state of physical body, understanding of diet and nutrition, which include regular physical activity, nutritional responsibility, sufficient relaxation and sleep, self-care and safety awareness. In addition, one of the most noted benefits of this practice improved quality life. The emotional dimension addresses the management of one's awareness, control, and acceptance of emotions. Goleman (1995) contends that the emotional dimension may be the most important one when dealing with personal relationships. The value of emotional wellness was alluded as the opportunity to help others enhance positive self-worth (Golemann, 1995). It refers to the need for personal identity and a feeling of belonging. It emphasizes the interdependence with others and with nature and includes the pursuit of harmony with one's immediate human and physical environment as well as with the larger community and with nature (Sackney & Miller, 2000). Healthy relationships with other people contributed to the ability of people to achieve a lifestyle of high-level wellness (Ardell, 1986). Spiritual wellness focuses on that 'big picture' view of life. A spiritually well person can accept and appreciate that which is not completely understood. They also seek to question the meaning and purpose of life for themselves and those around them (Ardell, 1986; McGuire & Snow, 1994). Spiritual wellness included concepts such as character, morals, and values, as well as beliefs (Kolander & Chandler, 1990). Dyer (2001) wrote that religion was something people come into and was the foundation to how they were raised to obey a set of customs and traditions. While these customs were outside the person, they dealt with expectations of spirituality. Intellectual wellness encourages creative and stimulating mental activities; it is about the on-going acquisition, further development and creative application of independent and critical thinking skills, and openness to new ideas. According to Hettler (1980), an intellectually well person uses the available intellectual and cultural activities and resources to expand his/her knowledge to improve. Palmer (2004) argues that many juveniles in reform schools of industries are still suffering from educational neglect, and are illiterate or semi-illiterate. Career wellness has to do with the ability to choose an occupation that is in line with one's interest, skills and abilities. Wrzesniewski, McCauley, Rozin, and Schwartz (1997) concur that people who view their career as a calling tend to experience the highest work satisfaction. Conversely, Eliot (1974) states that, the effect of unemployment on the individual includes a lowering self-esteem, a feeling of uselessness and a sense that life may be meaningless. Young people perceive themselves as being a burden because they might feel they have let their family down by not contributing to the family income, and they are subsequently to commit criminal acts and antisocial behaviour. The study used all six wellness dimensions as a lens to view the teachers involvement in juvenile offenders' lives in the correctional schools context.

Furthermore, an African lens of Ubuntu was also used in looking at how wellness dimensions are enhanced. Muntingh and Monaheng (1998:13) point out that African families took collective responsibility for one another, and in some rural areas this is still the happening. Oduro (2006) posits that, in Africa, the members of the group work together as a collective, to solve problems of the individuals. For example, if the matter cannot be resolved within the family, community or senior relatives were invited to help with the resolution process, where the victim or the offender is placed at the heart of the justice process. This implies that as teams work together to resolve the problems, then the latter seems to be lighter since there are a variety of inputs and advice derived from relevant experiences (Carnegie, 1986). Thus, the imprisonment of offenders did not form part of African indigenous law (Ou, & Reynolds, 2010). It is unfortunate that this does not happen anymore. Juvenile delinquency is said to be caused by "rapid social change that weakened community and neighbourhood controls over children and produced neighbourhoods characterized by

high rates of crime” (Regoli, 1994: 144). The current study looked at how Ubuntu is applied in curbing crime and ensuring that juveniles’ wellness is enhanced in correctional centres schools.

METHODS

The study is embedded within a transformative paradigm framework. According to Chilisa and Kawulich (2012), transformative or emancipatory paradigm destroys the myths and empower people to change society radically. Hence this study was an attempt to explore into how teachers in correctional centre schools can be change agents in the lives of juvenile offender learners. Furthermore the paradigm guided the researcher in looking into the multiple realities that may bring social change in the context of juvenile offenders who may leave prison being changed beings and their wellness enhanced through the help of teachers. The values of teachers, the element of Ubuntu plays an important role in social change and the lives of offenders.

The research design of the study was qualitative. This method was flexible as it allowed the researcher to obtain an in-depth thick rich description and understanding of actions and events of data (Creswell, 2007; Merriam, 2002). Hence, the study intended to understand how teachers constructed their world, and what meaning they attribute to their experiences in addressing the wellness of juveniles in a correctional school.

Ethical clearance was sought and granted from the University of South Africa, the Department of Correctional Services and the research sites, which were correctional centre schools in Gauteng, Free State, Kwa-Zulu Natal and Western Cape provinces. The gatekeepers, which are the people who enable researchers to gain entry into a research site (Wagner, Kawulich and Garner, 2012), were fully consulted. For this study, the gatekeepers were the Department of Correctional Services and the correctional schools. Furthermore, the principals and educators were met and the study’s aims and objectives were outlined to them. Juveniles also got an explanation of what the aim of the study was prior to data collection. The participants were assured anonymity and that their rights were respected at all times. It was also explained that their participation in the study was on voluntary basis.

Sampling was purposive since only educators of the correctional centre who teach juveniles participated in the study. These were educators teaching ABET level 1-4 Grade 10-12 and NCV juveniles. Wagner et al. (2012) define purposive sampling as choosing participants who may be considered to be representative of the population and usually uses specific selection criteria.

Table 1. Biographical data of Participants

Province	Educators	Juveniles
Gauteng school A	5	11
School B	12	15
School C	12	66
Free State	2	17
Kwa Zulu Natal School A	5	30
School B	6	28
Western Cape School A	10	22
School B	8	18
Total Participants	60	207

Interview guides were used as research instruments for data collection. The questions covered by the interview guide covered aspects such as their qualifications in teaching, their experience of teaching a particular subject and grade, the challenges that they experience in a correctional centre school, their role as educators, how they teach and methodologies used, how they assess and what the juvenile offender learners say. All these questions were open-ended and required that the participants should elaborate on their answers. Questionnaires were also provided for those educators who preferred to write and not to participate in interviews.

Interview guides and questionnaires were developed for juveniles. The questionnaires were open-ended to allow juveniles to elaborate on all dimensions of wellness such as intellectual, emotional, social, physical, spiritual and career wellness.

Data Collection

Data were collected from 60 educators and 207 juvenile offender learners in eight correctional schools in four provinces, namely; Gauteng, Kwa Zulu Natal, Western Cape and Free State. The researcher ensured anonymity to both educators and juvenile offender learners who participated in the study. The internal guide from the Department of Correctional Services accompanied the researcher in all four provinces. Participants were interviewed individually so that they can freely flow in answering the questions without feeling any discomfort. Each educator was interviewed for 60 to 90 minutes at the correctional school staff room or office. Most of the juveniles preferred writing or completing questionnaires other than interviews. This was done in the presence of correctional officials who were on duty.

Data analysis

Merriam (2002) outlines the steps of qualitative data analysis as working with the raw data, organising, breaking it into manageable units, coding them, synthesising it, and searching for a pattern (Henning, *et al.* 2004). The analysis of data collected from the interview process of the teachers was by coding, compiling similar information into cluster groups and categorise information by identifying similarities, differences and recurring regularities into emergent themes (Creswell, 2007; Henning, *et al.*, 2004).

DISCUSSION OF FINDINGS

Themes that emerged from Teachers

Lack of resources: Findings revealed that the budget for Learner Teacher Support Material (LTSM) may be so little that it becomes cumbersome to purchase many books for learners and teaching aids. Teachers often improvise by bringing self-made teaching aids to support their teaching in class. Teachers showed a spirit of Ubuntu in assisting learners. Some correctional schools had computer centres but they were not utilized by learners in ABET level 1-4 and Grade 10-12 learners. In applying Ubuntu some teachers may give tasks that may expose learners to use computers eg designing cards for Mothers Day etc.

Lack of qualified teachers in correctional schools: In Gauteng, out of three correctional schools where data were collected, two schools had adequate number of qualified teachers, one lacked teachers and the management requested offenders who had matric or beyond to teach, especially in subjects with scarcity of teachers like Mathematics and Science. In two schools in KZN, one had a shortage of teachers and no offenders were involved in teaching. In Free State, it was even worse only one was qualified as a teacher some were not qualified but they were teaching. In Western Cape, both schools had a sufficient number of teachers though some were worried about being overloaded. The shortage of teachers in correctional schools has an impact on results or output at the end of the year. Teachers indicated that if salaries were higher in correctional schools, surely that would be an attraction for most teachers to work in correctional schools. They indicated that extra incentives would be necessary due to risks associated with the job in correctional schools.

Physical Education: The challenges experienced by teachers who teach Life Orientation were the practical implementation of physical activities like sports during school hours. Some expressed that there were limitations to go to playgrounds due to time frames and some restrictions. Sports activities are allowed and managed by officials in SRAC (Sports and Recreation Arts and Culture). Learners have a choice of participating in SRAC activities in promoting their physical wellness. Regarding health issues, teachers complained about juveniles who smoke while in school premises, which is prohibited. As a researcher, I also observed in one centre where juveniles were smoking in the school premises, whereas in other correctional schools no learner smoked publicly. Most teachers encouraged learners to behave well even when playing sport.

Dropout rate of juvenile offender-learners: Findings indicated that in some centres, in particular, Gauteng correctional schools, had a high dropout rate. Teachers said that bad influence emanate from the cells where learners meet those who do not attend school. Conversations at the cells are discouraging regarding class attendance and those who attend school end up giving in. Some teachers go an extra mile of going to the cells and encourage juveniles to

come to school. Teachers give one on one motivation which makes a huge difference when a learners realizes that teachers care.

Lack of career guidance: Teachers expressed that there was generally lack of career guidance in juvenile classes. The main focus was on academic subjects and that offender learners should pass. To teachers, it was not important for them to look ahead on how these offender learners will be absorbed into the world of work. Lack of career guidance would lead to unemployment upon release and recidivism may also increase. Teachers were aware that most juveniles were incarcerated due to parents who were unemployed and poor. In Gauteng, one correctional school managed to introduce some skills on a limited scale to try and improve the aspect of career wellness. In KZN, one correctional school tried to guide offender learners to proceed beyond matric and choose relevant fields. They even went to an extent of getting sponsors for learners who performed better in matric results. In a way, the correctional school in KZN was offering some career guidance.

Emotional and Social Wellness: There was lack of emotional control observed among juveniles and inconsistent behaviour observed by teachers. The teachers indicated what they observed regarding the emotional and social challenges of juvenile offender learners, was the continual support from faith-based organisations like Christian and Muslim groups. These organisations were committed to offer emotional and spiritual support on weekly basis, which helped many juvenile offender learners. Some who repented upon release would come back to preach to the remaining offenders and bring a message of hope. Though psychological services were availed, they were limited due to few psychologists employed by the Department of Correctional Services. Findings also pointed out that social workers could only see few offenders and some would come to school being traumatized but they will wait until the social worker come for visits. Teachers were trying to intervene though this was on a limited scale due to lack of counselling skills.

Lack of skills to deal with juvenile offenders: Findings of the study highlighted that there was lack of training in counselling juvenile offenders. They all indicated that they try to use common sense in counselling juvenile offender learners and they are not sure whether they are doing the right thing or not. In all provinces, they indicated that they need lay counselling course so that they can be able to deal with day-to-day challenges encountered by juvenile offender learners in correctional schools. Some teachers indicated that they are also stressed by the situation and it works on their emotional wellness and they often experience burnout. They also indicated that they need specialized training to teach in a correctional school not only training on security issues only which is currently provided by DCS.

Themes that emerged from Juveniles

Physical support in the form of sports and recreation, (inadequate participation and health support): Due to overcrowding in some correctional centres, facilities for sports are limited. The findings revealed that regarding physical wellness in correctional schools, most offender learners participate in soccer, which appeared to be a popular sport. Correctional centres in Kwa-Zulu Natal had many juveniles and they complained that facilities are limited they can only participate in few sporting activities. In Gauteng, the number was reasonable but there are schedules that are beyond their control. In Kwa-Zulu Natal, juvenile offender learners are forced to go to cells while they still enjoy to be outside and that created a limitation to participate in sport. The opposite was experienced in one correctional school in Western Cape where juvenile learners participated in many sporting activities (rugby, soccer, surfing, boxing etc.) and there were trophies which were displayed, which supported what learners were saying. Juveniles were encouraged to participate with teams from outside and this was seen as a positive way of encouraging social reintegration. In all four provinces, most juveniles preferred soccer except the Western Cape Province where rugby was popular. In all correctional centres, there were health clinics where juveniles were diagnosed and given medication, which is a positive element in South African correctional centres regarding physical wellness. Teachers encouraged juvenile offender learners to be actively involved in sport and to visit the health clinic.

Lack of career guidance, resources e.g. books: Juvenile offender learners had a period of integration in lower grades and Life Orientation in Grade 10-12 in all correctional schools. Nevertheless, they all complained about lack of career guidance from teachers. There were no materials in the libraries. In Kwa-Zulu Natal, one school had a functional library and the other had no library at all. This is a clear indication that learners were not exposed to reading extra material other than from textbooks in class. The correctional schools in the Western Cape both had functional libraries

though the other one was more equipped where learners can search for information on different careers. However, in class, there was a limitation regarding awareness on different careers. In Free State, there was no library and also learners indicated that there is no information on career guidance. In Gauteng, the three centres had libraries that were adequately equipped though students expressed lack of career guidance in classes. Juvenile offender-learners aspired to do the following: plumbing, computer skills, electrical engineering, graphic design, and to be music producers. There is a need to beef-up Life Orientation lessons in promoting career wellness in correctional schools in all provinces.

Juveniles enjoy practical subjects: Juveniles in all correctional schools in four provinces indicated that they like practical subjects where they learn skills. On the other hand, they enjoy English and Maths, and integration since they can apply the knowledge in real life situation. In some correctional schools, there was an attempt to expose juveniles to skills subjects but not all of them can be accommodated in the workshops due to large classes of juvenile offender learners. In order for the academic wellness to be enhanced, subjects should be linked with real life situation or case studies should be used so that offender learners can apply the knowledge, skills and values immediately.

Erratic School patterns: Some schools start at 8h30 and by 11h00 juveniles are sent to cells, whereas others start at 8h30 until 14h00 or 15h00. The observation of an erratic school pattern was an interesting one since it gives the picture of how schooling is viewed by the correctional centre management. The correctional schools that had longer duration of school hours had good results and there was a positive academic wellness on the side of juveniles. Most learners were not enjoying to be in cells but they reported that they do not have a choice but to abide by the rules of the centre. The findings revealed that in all provinces where research was conducted, in some days, there were no classes due to officials' schedules and juveniles cannot be at school if there was no security. The Department of Correctional Services should try to apply uniform schooling patterns in all provinces as part of the rehabilitation strategy.

Support for Emotional and Social wellness: Due to the shortage of social workers and psychologists in South Africa, there is minimum use of those professionals in all correctional centres. Only few offenders can see a psychologist or a social worker in a month. All correctional centres had faith-based organisations, which assisted offender learners to cope emotionally and socially. Findings revealed that there are programmes for Anger Management provided by service providers, which assist offender learners with coping skills in a correctional centre. Furthermore, findings revealed that there were a number of offender learners who never had visits from the family members; this may be a negative element for emotional and social wellness for offender learners. Some family members are unemployed and may not be able to travel to the correctional centre to see their child or sibling.

Aspirations from juvenile offender-learners: The findings of the study revealed that in all provinces where research was conducted some juveniles expressed that they want to be good fathers since they never had one. Their desire was to have stable families, good jobs or be businessmen who take care of their children. Some expressed the desire to be forgiven by the victims, to do things properly, and not to return to prison. If the school in a correctional centre can make one to realize their wrongs, then the recidivism rate will be low. Some offenders appreciated the role played by teachers in showing Ubuntu and empowering them with literacy skills since some were illiterate upon incarceration.

RECOMMENDATIONS

The current study revealed that the wellness of juvenile offender learners needs some attention from the authorities of Department of Correctional Services and the Department of Basic Education. The types of learners that are found in correctional centres are learners who had some challenges in life; that is why they were incarcerated. Sadly, there is nowhere in policies of inclusion or Life Orientation where learners in correctional centres are addressed. As far as the teachers' wellness is concerned, more is at stake at the moment and if teachers' needs are addressed adequately, much will be achieved. Teachers will be in a position to address rehabilitation processes from a classroom context and mould offender learners in a holistic way.

The following are the recommendations from the current study:

- Juveniles who are incarcerated also need to be addressed in policies of inclusion and White Paper Six on Inclusive Education (DoE, 2001). All types of learners' needs should be addressed in policies. Interventions

done from the University where the researcher is employed is an attempt to address the needs of learners in detention.

- Teachers need to have some specialised way of training to be able to cope with circumstances in a correctional schooling system. Lack of specialised training may lead to poor output regarding the goals of correctional schools;
- Form partnerships and a network system that will try to build a holistic juvenile learner, TVET colleges to be service providers to DCS in the provision of skills;
- Support from psychologists and social workers should be increased. The problem may be alleviated by universities which train Master's Students in Psychology or Educational Psychology to send their interns for a period of a year to assist in correctional centres. This could be an additional support network that correctional centres may establish with universities or HPCSA (Health Professions Council of South Africa).
- NGOs may also be contacted that auxiliary social workers may on regular basis have sessions with juvenile offender learners so that their mental and emotional wellness is addressed;
- Family members should be in contact with juveniles since some of these juveniles do not reveal their true identity, though they may be encouraged on the importance of families and a healthy relationship. This should be part of therapeutic intervention either from the teaching personnel or from psychological or social workers;
- Educators should also be equipped with lay counselling skills and assist where they can since they spent more time with these learners. Emotionally stable learners are likely to gain more in class than those who are unstable or traumatised. Teachers should be able to identify and intervene appropriately; and
- Universities should train educators for correctional schools in various specialisation subjects and be equipped in addressing cognitive, emotional, social, volitional needs and stages of development of juvenile learners in incarceration.

LIMITATIONS OF THE STUDY

The study focused only on teachers in Correctional schools with male juveniles and not female juveniles. Further research should be conducted in schools with female juveniles in correctional schools. Another shortcoming is that the study was only limited to four provinces in South Africa. Therefore, there is a need to conduct further research in provinces that were not included such as North West, Limpopo Mpumalanga, Eastern Cape and Northern Cape.

CONCLUSION

From the educator's side, there are factors that cause barriers to learning on the side of learners which are beyond their control. Health-related issues on the side of learners disrupt the smooth process of class attendance and this affects their intellectual wellness. Assessment processes are also disturbed by factors beyond the control of teachers because learners are summoned to court or there are other obligations at the sections or cells which must be fulfilled. Findings reveal that teachers grapple with academic wellness issues. However, some can receive attention and be communicated to senior officials and there can be an improvement. Findings reveal that juvenile offender learners enjoy lessons that link with practical life experiences. This is a clear indication that learning takes place from what the person already knows and then one can move to the unknown. Regarding social and emotional wellness, the faith-based organisations have an impact in providing therapeutic interventions. More still needs to be done in career guidance since this is a critical area to ensure that teachers are adequately trained in facilitation of skills and learners are guided accordingly to curb recidivism. Correctional education should be taken seriously by Department of Correctional Services and Department of Basic Education and Department of Higher Education. It is crucial that universities should train teachers that specialise in correctional education to address educational matters in correctional centres.

BIOGRAPHY

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Adolescents' Perceptions Toward Health Risks By Physical Activity Participation

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ABSTRACT

The current study was to identify health risk perceptions and perception bias in adolescents. Moreover, the study investigated the differences in health risk perceptions by physical activity. A total of 625 adolescents (314 male and 311 female) were voluntarily participated from the Nowon district, geographically located in northern Seoul. In order to measure health risk perceptions a Korean version of self-other risk judgments profile and leisure time exercise questionnaire were used. Results indicated that the study participants, regardless of gender and age, tend to underestimate their vulnerability to the majority of health risk events. The finding revealed that there were significant differences in perception bias toward to health risks by gender and the physical activity level. Furthermore, it is revealed that risk perceptions are directly associated with physical activity participation. The significance of this study lies in the fact that it made a unique contribution to the existing knowledge in exercise and health psychology on relationship between risk perceptions and physical activity.

Keywords: health risk perception; perception bias; physical activity; adolescent

Sustainable Energy: Game Changer In Education In Undergraduate Finance Courses

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ABSTRACT

This case triggers the financial debate of sustainable development with an emphasis in energy as an important game changer in the world. The CFE (Federal Electricity Commission), the state-owned company supplier of electricity in Mexico has to face the greatest challenge in its history: increase the electric power required for economic development; this would mean having to add an additional electricity capacity of 57,122.3 MW (Mega Watts) for 2030. The Mexican Secretary of Energy expects that 37.8% will be provided by conventional technologies, and 62.2% through clean technologies. Thus, there are 35,530.07 MW of additional capacity pending on future clean projects. This case shows the financial and ethical dilemmas in order to achieve these goals with a focus on sustainability, seeking to minimize emissions of greenhouse gases. Aging coal plants, cheap natural gas, and a downward trend in the price of renewable energy, are signs of a dramatic structural change in the world electricity sector. These trends are likely to hold in the future where solar technologies have made up a bigger share, and regardless of their small percentage of participation in the energy mix, solar energy could reveal a surprising new story for the world. Facing CFE's challenge, this case explores the role that solar photovoltaic energy could play where the sky is the limit.

Keywords: electricity capacity, renewable energy, solar photovoltaic energy, sustainability.

INTRODUCTION

On October 25, 2016, the Mexican Secretary of Energy, Pedro Joaquin Coldwell, appeared before Congress stating that “we are working in the energy transition towards a low carbon emission economy” (Canal del Congreso, 2016). As promised on that day, the study that could help Mexican legislators in Congress to envision the scenario for the generation of electric power in Mexico by 2030 was published on December 30, 2016 (SENER, 2016a).

Jaime Francisco Hernandez-Martinez, the Director of the CFE (Federal Electricity Commission), the state-owned company supplier of electricity in Mexico, faces the greatest challenge in CFE's history: increase the electric power required for economic development and secure the supply of electricity with a sustainable approach, according to SENER's scenario submitted to the Mexican Congress.

STATISTICS SUBMITTED TO CONGRESS

The scenario for electricity generation sent to Congress, aimed at identifying the path of growth for the electricity sector in Mexico toward 2030, which could definitely lower CO₂ emissions, and is summarized in Table 1 (SENER, 2016a).

The Director of the CFE, Jaime Francisco Hernandez-Martinez, agreed with the legislators and the Secretary of Energy (SENER) that it was essential to walk through the path of renewable energy, but he questioned the fact that the scenarios gave more importance to the growth of wind energy compared to solar energy. If wind energy would increase its participation from 4.1% to 13.8% in total capacity in 2030 compared with 2015, would it be possible to envision a more dramatic change in the estimated participation of solar energy that now is estimated to grow from 0.25% in 2015 to 6.3% in 2030? Will solar energy surpass the 6.3% participation by 2030?

Reviewing SENER's statistics, he thought about the importance to explore the role that solar photovoltaic energy (PV) could play in this scenario, due to the recently published 2016 statistics of solar energy growth in the U.S. where 39% of new generation capacity came from PV. The U.S. Solar Energy Industries Association projected to triple its generation capacity in the next five years, because for solar energy, indeed, the sky is the limit (SEIA, 2017a).

Hernandez-Martinez immediately called upon a meeting with his collaborators and expressed the following: — “Indeed it is a great effort of the Mexican government to change the structure of the installed capacity in the utility industry, where renewable energy will go from 28.3% in 2015 to 50.1% in 2030.” Some members of his team spoke up and asked: — “What role will this scenario play in the possibility of having more solar photovoltaic energy (PV)?; How is it possible, that wind energy will participate with 15,101.10 MW compared to the 6,904.90 MW of solar energy capacity in 2030?; Would it be possible to envision a change which could favor solar energy to wind energy towards 2030?”

Listening carefully to the debate, another collaborator referred to a research on this topic (Islas, 2009) and said that Mexico more than an oil country, is a country rich in renewable energy sources. It is, particularly, a solar country. A simple calculation could demonstrate that if we cover only 0.14% of Mexico's territory with photovoltaic solar cells, especially in the north where solar insolation is greater, Mexico could meet its current national requirements of electricity. The use of technologies and renewable resources would ensure self-sufficiency and energy security in the medium and long term, the opportunity to develop its own technologies, to create new industries with a significant amount of jobs, and to eliminate negative externalities (greenhouse gas emissions) currently generated in the Mexican electricity sector due to the use of fossil fuels.

Others talked about a document on renewable energy, also presented by the Secretary of Energy (SENER, 2016b), which stated that the price of solar energy technology has decreased, becoming a new competitive renewable technology in the world.

Given this information and being aware that in the period 2008-2035, nearly 53% of the world's energy demand will come from the generation of electricity (SENER, 2011), Hernandez-Martinez tasked a Solar Energy Committee to conduct an investigation into the solar photovoltaic industry. If electricity generation accounts for 32% of the world's consumption of fossil fuels and the generation of 41% of total CO₂ emissions (IEA, 2010), changing the technologies used in electricity generation should be a central part of any effort to achieve reductions in global CO₂ emissions. Mexico is indeed committed with the world in fostering the leadership of a new path of sustainable growth of its electricity sector.

To understand the importance of solar energy there are several national and international entities that are immersed in the desire to move the world into renewable energy (SENER, 2006). In Mexico, the support for solar energy growth comes from the Electrical Research Institute (IIE, 2010), the National Association of Solar Energy, the Mexican Association of Suppliers for Renewable Energy, and The National Commission for the Efficient Use of Energy (CONUEE) , among others.

Therefore, the objective of the creation of the Solar Energy Committee within the CFE, will be to explore how the solar photovoltaic industry could become a possible and more important alternative source for electricity generation in the scenario presented by SENER. Among its objectives is to present the advantages and disadvantages of solar energy generation and/or production, and the current dilemmas for its development in Mexico.

At the end of the session, Hernandez-Martinez asked himself: — “Could the results of this research change the scenarios for 2030 and make solar energy a more important player in the Mexican energy mix?”

MEXICO IN THE WORLD SOLAR BELT

After the formation of the Committee, Hernandez-Martinez went home and began to review some documents to refresh his knowledge about solar energy. According to the United Nations (1992), the power of solar radiation varies according to the latitude of the site, time of the day, and atmospheric conditions that could decrease or increase its power. It can be assumed that radiation power on the Earth's surface on a clear day, at noon, is close to 1,000 W/m²

(watts per square meter). This power is known as “irradiance”. During the day the solar irradiance varies according to the angle of the sun, the season of the year, the latitude, and the climate (UN, 1992). Therefore, it is necessary to have data on the insolation available at a specific place to design the optimal solar system for that spot. This process is called sizing of the system (structural dimensioning). If oversized, the system is more expensive than necessary and if undersized, it may not attract all the available irradiance at all times.

The usable solar radiation can be obtained directly, indirectly (diffused), or with the sum of both. Direct radiation is coming directly from the sun on a straight line without intermediate reflections or refractions; this radiation is like a beam and the easiest to capture for future use. The diffused radiation is the one that is absorbed by the atmosphere in clouds and other atmospheric and terrestrial elements and is radiated by the daytime sky, thanks to the phenomena of sun reflection and refraction.

Considering the amount of energy received from the sun, SENER (2012) states that Mexico has an average insolation of around 5.5 kwh/m²/day (kilowatt-hour per m² per day), which is a relatively high value. This value varies throughout the year according to the geographical location (especially latitude) and weather conditions in a given spot.

Hernandez-Martinez learned about some of the technological breakthroughs developed by Pedro Ponce Cruz, Director of the Master of Science in Engineering at Monterrey Tech, with the help of his Mechatronics students. They designed a special mechanism based on the efficient movement of solar cells using a solar magnetic optical tracker. The purpose of the solar tracker is to find the optimum position of solar cells for getting the maximum amount of radiation throughout the day. This product works with optimization algorithms which consider environmental factors, such as wind, to determine the right time to move and re-align the solar cells. This innovation with a beneficial effect on the environment, allows a better use of solar radiation with an increase of up to 35% of captured solar radiation.

SENER (2009) asserts that Mexico has favorable natural conditions for the application of photovoltaic systems. In many parts of the Mexican territory, the average solar radiation is twice that of European countries like Germany, which is currently one of the largest PV markets in the world. SENER also states that the immense potential of Mexico has been underexploited. By 2009, Mexico had only registered a capacity of approximately 25.1 MWp (MWp =Megawatt peak), which is the highest potential for solar PV under ideal conditions of photovoltaic systems, compared to 3,800 MWp of installed capacity in Germany for the same year. Hernandez-Martinez asked himself: — “What changes should be implemented in order to develop solar energy in Mexico?”

Kearney, Hauff, et. al. (2010) presented a hope for the future development of photovoltaic solar energy in the world, especially for the countries located in what they call the Solar Belt (Sun Belt). In this study, an “accelerated scenario” estimated that these countries could increase their PV installed capacity to about 405 GW (Gigawatts) for the year 2030, taking the opportunity to provide sustainable electricity for about 300 million people (Mexico is expected to have 7 GW of solar capacity for 2030). Mexico is located precisely in the Sun Belt which has a high propensity for a successful exploitation of PV. Furthermore, the analysis mentioned the most attractive countries for investment in PV: China, India, Australia, and Mexico. In second place other group of countries were identified: Turkey, Argentina, South Africa, Saudi Arabia, Egypt, and Thailand. In third place, developing countries like Kenya, Vietnam and the Philippines, as well as countries with high political risk as Angola, Yemen and Lebanon were identified.

Hernandez-Martinez was excited to realize that Mexico is located in the Sun Belt and asked himself: — “What are the advantages that Mexico presents compared with the other countries located in the Sun Belt? How is Mexico attracting investors for public and private investment in PV? Are Mexican reforms in energy enough to attract those investors to increase the PV infrastructure in Mexico?”

To evaluate the attractiveness of Mexico for the exploitation of solar PV, there are some factors to be considered: projected growth in electricity consumption by 2030, the competitiveness of PV compared with other available sources of electricity, distribution of electricity in the country, losses in transmission, flexible mix of energy sources, and the rate of electrification of the country (covered area with electricity networks).

Kearney, Hauff, et. al. (2010) proposed another scenario for the countries located in the Sun Belt through a “paradigm shift” for electricity generation. They affirm that there is the possibility to generate up to 1,100 GW of PV that would

represent up to 12% of total power generation for some countries by 2030, where Mexico is expected to have only 6.3% of PV participation. In this scenario they expect a technological improvement by 2020 and a decrease of solar power costs for countries located in the Sun Belt. This would make solar energy more competitive than fossil fuel energy. In the long run, the authors are even more optimistic, expecting to be able to reach a lower cost level for solar energy for the year 2030. If this happens, PV would be even more competitive than the combined cycle power plants based on natural gas. A more recent study (Jäger-Waldau, 2013) projects that this downward trend will be kept towards 2033, making it a promising future for the world.

If photovoltaic technology takes off and achieves anticipated cost reductions, will the Mexican power grid be ready to make the transition to photovoltaic systems for years to come? Hernandez-Martinez expects that the new regulatory support under the 2013 Mexican energy reform could be helpful.

IEA (2009) estimates that around 80% of the expected world growth of electricity demand will come precisely from the countries located in the Sun Belt. The economic expansion of India and the Asiatic southeast could be supplied with solar energy (IEA, 2013).

Jacobson & Delucchi (2009) reported that the viability of the world's electricity requirements could totally be supplied by 2030 as follows: 50% wind, 40% solar, 4% geothermal, 4% hydroelectric and 2% of the sea waves. They consider that nuclear, coal, ethanol, oil, and natural gas are poor options. Hernandez-Martinez asked himself: — “What are the conditions required to perform the transition proposed by Jacobson & Delucchi?; Is the world prepared with financial incentives and special management systems to optimize energy use during peak hours?” They pose the following dilemma: Is it possible to transform the global electricity system in just two decades? For them, the answer will depend on the technologies that are chosen, the availability of critical raw materials, and the economic and political factors.

Hernandez-Martinez remembered that Iceland is an example of hope where renewable energy provided almost 100% of electricity production in 2015: 73% from hydropower and 27% from geothermal power. Thus, Iceland has become the world's largest green electricity producer in the world.

SOLAR PHOTOVOLTAIC TECHNOLOGY

Regardless of the passing of time, Hernandez-Martinez could not stop himself from digging through the documents on his desk in his home office. He realized that solar electricity is not ready for its use directly from nature. For this form of energy, men must design and develop appropriate conversion systems (Palz, 1978). Thus, he was eager to learn more on PV technology.

The photovoltaic effect is a physical phenomenon by which certain fabricated devices (photovoltaic cells) function as semiconductors and are capable of converting sunlight into electricity without any intermediate process.

A photovoltaic cell has the primary function to convert energy captured from the sun into electricity at the atomic level; many of them have a property known as the photoelectric effect which makes light photons to be absorbed in order to irradiate electrons later, which once captured, generate an electric current that is used as electricity by conversion. Albert Einstein described the photoelectric effect, which is the fundament of actual photovoltaic technology; his work awarded him the Physics Nobel Prize in 1921 (Energia Solar, nd).

Photovoltaic cells, also known as solar cells, are made of semiconductor materials, especially silicon, the same material used in the microelectronic industry. A thin semiconductor wafer is used to cause a positive electric field on one side and a negative on the other; when the sunrays reach the photovoltaic cell, electrons are knocked loose from the atoms in the semiconductor material to generate electricity.

A photovoltaic panel is formed with a group of cells. An arrangement of several electrically connected panels in a structure, generates a photovoltaic module. Photovoltaic systems can operate in isolation (rural areas) or connected to the electricity grid. With regard to the latter, they interact with the network via an electronic interface (inverter) which converts the direct current into a photovoltaic array of alternate current.

The urban-type solar PV system is one that is connected to the network of CFE and is used in cities in order to lower the utility bill paid to the state owned electricity company (CFE). These solar systems are silent, have no moving parts and only eventually require cleaning to ensure that the sun's rays penetrate properly. The sun's rays are converted to direct current which is then converted to alternate current in an inverter. This inverter synchronizes the voltage and frequency with CFE network to be delivered at the citizen's residence in a transparent and stable way. If the system is delivering more energy than the required for consumption, it will go back to the CFE network meter spinning in reverse. In short, this system uses the CFE as a temporary energy storage who returns energy at night or when there is no sunlight, saving the user the investment and the installation of a battery bank which is usually costly and polluting (Powerstein, 2010). For this scheme to work, it is required to establish a two-way contract that must be processed by the CFE.

The rural type solar PV system is used in places far from the CFE network and need a battery bank to store energy. The sun's rays are converted to direct current which is stored in those batteries and then the energy would be converted to AC (alternate current) in the inverter that simulates the type of energy that would be delivered by the CFE.

Silicon is the main material used in the PV systems, and most of the photovoltaic devices are made of crystalline silicon (UN, 1992). There are two types of crystalline silicon: a monocrystalline (single crystal) and a polycrystalline (multicrystalline or semicrystalline).

PV systems are currently feasible for places far from the grid, for electrification, rural telephony, and pumping water, among others. They have the following advantages (World Bank, 1995): installation speed, easy dismantling of the plant once it has finished its useful life, easy maintenance (can be serviced without closing the plant as it is driven by solar modules), with the benefit of operational improvements and lower maintenance costs.

PV is already playing an important role in the generation of electricity around the world. This is due to the fact that the fast decrease in costs of this technology has made the non-subsidized PV a competing technology with those that use fossil fuels (SENER, 2016b).

As Palz, W. (1978) confirms, the development of the applications of solar energy does not mean the beginning of a new economic world; on the contrary, the new energy systems must win their place in the entire energy market first, by being competitive with oil, coal, gas, or nuclear power, either by depletion of conventional sources (non-renewable resources will eventually be exhausted and no country can rely on them indefinitely), due to lower chemical contamination of the environment, looking for a greater independence from foreign countries, or just because of their lower costs.

SENER (2009) forecasted that in a period of 3 to 5 years PV systems in several regions of Mexico are going to become profitable, by decreasing prices, resulting in higher sales volume and making market niches more attractive. Hernandez-Martinez asked himself: — "If they are right, what are we doing to exploit this available renewable energy source?"

FINANCIAL STRATEGY FOR THE DEVELOPMENT OF PV

Palz (1978) recommends that a country should promote their "inner energy sources" even when they are more expensive than imported energy for two reasons. Firstly, since energy is an important input in the economy, the trade balance could be adversely affected if the share of imported energy is too large. Secondly, if energy imports were restricted, the economy's growth could be hindered; thus, importing energy means economic vulnerability.

Likewise, Palz (1978) provides the criteria for the development of a long-run energy policy: granting independence from foreign supply, securing long term availability at reasonable prices, decreasing pollution, and keeping environmental purity. He also points out that energy should be both, comfortable in its transport and use. One might say that solar energy has no drawbacks, the heat balance of the earth is not altered and it is universally accepted.

The Secretary of Energy in Mexico (SENER, 2011) was aware of the importance of implementing short-term actions that can generate a national energy transition, meaning a radical change in the way in which it is obtained and

consumed, as well as to enable the country with the reduction of greenhouse gas emissions, mitigating the environmental impact of the sector and helping to combat the effects of climate change.

Hernandez-Martinez proudly said to himself: — “Mexico excels in the world for its commitments with the most ambitious targets in electricity generation with renewable resources.” Thus, Mexico has taken various actions and initiatives, using the criterion of sustainability as a central focus. It is noteworthy that the Law on the Use of Renewable Energies and Financing of the Energy Transition (Ley para el Aprovechamiento de las Energías Renovables y el Financiamiento de la Transición Energética), published in the Official Gazette (Diario Oficial de la Federación) on November 28, 2008, clearly established the target of 35% of electricity generated through renewables by 2024. Its commitment includes not only the regulation but the financing process of this energetic transition.

The Trust Fund CONACYT-SENER-Energy Sustainability was established to foster scientific research and applied technology for renewable energy sources, energy efficiency, clean technologies, diversification of sources of primary energy, and the adoption, innovation, assimilation and development of technology in these areas.

SENER, supported by the World Bank, promoted projects that encourage a national policy for rural electrification with renewable energies.

The national institutions that provide financing for the development of renewable energy are: Mexican Bank for Foreign Trade (BANCOMEXT), National Council for Science and Technology (CONACYT), SENER (Mexican Secretary of Energy) and NAFIN (Nacional Financiera); among the international ones are: World Bank, Inter-American Development Bank, Global Environment Facility (GEF) and the European Investment Bank. Undoubtedly, private financing is also a major component to trigger financing projects in clean technologies.

SOLAR ENERGY AS THE PEACEMAKING HOPE AMONG NATIONS

As Hernandez-Martinez stood up from his chair holding a cup of coffee, he imagined a peaceful world based on solar energy. He asked himself: — “Will the energy and electricity reforms in Mexico provide the adequate regulatory reform in order to actively support the development of promising solar energy in the country?”

If Mexico is one of the countries located in the Sun Belt and its potential is extraordinary, Hernandez-Martinez prepared a list of questions to guide the research of the Solar Energy Committee:

- What should the government and CFE do to promote PV in the search for the optimal energy mix and the promotion of long-term investment?
- What incentives need to be designed to take advantage of the strengths offered by photovoltaics systems?
- What is the best way to exploit photovoltaics: connected to the national grid or developed by independent producers?
- What kind of political support needs to be given to the development of solar PV to contribute to the economic development of Mexico?
- Could the support for investments in photovoltaic cells promote the generation of new jobs through the development of supplying services associated with the production of this renewable energy?
- How willing should the Mexican economy be to open its market for developing photovoltaics through collaboration agreements with other countries who have major advances in this technology?
- How should Mexico support the development of its own photovoltaic cells’ technology?
- How should financial mechanisms for both private banks and development banks be developed to encourage the growth of solar photovoltaic technology in Mexico?
- How could Mexico promote the transfer of technological breakthroughs from advanced markets in photovoltaic technology?
- Within the Mexican energy reform, is there any specific mention of the development of solar energy?
- Should Mexico create a new independent institution to be in charge of the solar energy development?
- What is the real status of solar energy development in Mexico?
- What could we learn from those which are already walking through the sustainable electricity path of solar energy?

- Who will remove the brake to the countries located in the Sun Belt to develop the full potential that solar photovoltaics offer?
- What should be a visionary approach in the design of economic policies to incentive the transition into new paradigms in the generation of electricity?
- What could be the public and private commitments for the revolution of electricity generation through the emergence of a new photovoltaic power generation?

In a world context vision, Palz, W. (1978) states that the solar energy received on earth for the period of a year is 10 times larger than the total energy from fossil fuels. While solar energy is equally distributed, fossil fuels are located in an unequal geographical distribution among countries, concentrating mostly in the Middle East. PV represents a hope for each country offering more potential energy than needed, renewed annually by the sun. The opportunity to exploit this energy source is to visualize it as a “homemade reserve” that exists in all areas of the world. Only those countries that undertake the necessary efforts to develop techniques for processing it, will enjoy this gift from nature. Therefore Palz, W. (1978) insists that compensating the inequalities caused by the distribution of fossil fuel resources, solar energy holds out the hope for a better balance between nations.

There is an urgent need to study the long-term energy outlook for every country, not to mention that energy programs are inevitably also immersed in a political dimension.

It is essential to evaluate the possibility of redesigning a strategy to support the transition in Mexico from an unsustainable power generation system to one based on more renewable energy where PV could be a key game changer for 2030. Hernandez-Martinez eagerly awaits the report of the Solar Energy Committee in order to better understand the dilemmas of solar energy in Mexico and clarify them before the Honorable Mexican Congress to promote a more intensive PV participation in the future Mexican energy mix.

AUTHOR BIOGRAPHIES

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A Programming Course Using Video Game Design And Unity[©] With Code Examples

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ABSTRACT

Video game principles are used in virtual reality and training scenarios for military applications. Courses in video Games are something that colleges should look into making. This paper will offer a flexible course design and feature several code examples to assist in the course design.

INTRODUCTION

Video Games have been around since the 1980's and have consistently gained popularity. This sparked companies to create game consoles and games. Now, video games are everywhere and companies are looking for people to create them. Other industries and government agencies are also looking into video game design, especially for training. This paper will build on fundamental elements and demonstrate how to add features to begin advancing game design and implementation. Such a focus will make this a useful offering later in the curriculum. The course's goal remains: to create a 2D game that the students can play, and also expand on fundamentals. This course encourages students to explore programming, in general, as a career [8].

Glossary

This course has several important terms to understand:

- *Scripts* are used to control movements of characters and how they move on the game's environment. This can include animations of walking, running, and jumping. These same scripts and animations control various Game Objects.
- *Game objects*, generally are anything that interact within the game and are animated by scripts.
- *HUD* or *Heads Up Display* shows information to the player like health and other resources on the game screen itself.
- *Bosses*, challenging fights that tests the player's grasp of the game mechanics, is a combination of scripts, animations, and other parts of the game.
- *Sprites* are game objects in a 2D environment are governed by a sprite sheet that creates an animation sequence. To have a Game Object interact with the environment it must have
- *Rigidbody* gives the game object physical characteristics and a presence to the Game engine.
- *RPGs*, *Role Playing Game*, a game genre where players control a character inside a world and interact in it as if they are there.
- *FPSs*, *First Person Shooters*, are games where you interact with the games through the eyes of a character. Most often, the character is also operating some vehicle or weapon.
- *Gaming Artificial Intelligence*, are programming components that provide a change in environment or opponent behavior based on the players state (health, equipment) in the game.
- *KeyCodes*, are defined user inputs to interact with the game.
- *Respawn*, (of a character or item in a video game) to reenter an existing game environment at a fixed point after having been defeated or otherwise removed from play [11].

These are core terms that will be used in this paper. A basic understanding is all that is needed to see how this course will operate on teaching students programming and game design.

Philosophy of The Course

This course demonstrates the multi-disciplinary nature of the gaming industry. Programmers, engineers, writers, artists and composer's contribute. Each discipline participates, to varying degrees, in programming, interactive storytelling and game mechanics. This course focuses on a 2D game project with labs that lead up to that project. The clear objective of creating a game helps motivate students and gain an appreciation of the skills required to create and program video games.

The Unity Engine has been in production for many years now and is widely available. Many video companies and independent developers use this engine, such as Nintendo for the "Nintendo Switch" [12]. The game can be exported to various game systems on top of stand-alone executables for computers. The examples and code elements assume Unity.

This course is meant to be project driven. The project and the labs are emphasized to give the student confidence in mastering the material. Exams and quizzes could be used by the instructor to evaluate individual performance. With the iterative nature of programming, especially in a new environment and language, project and lab emphasis are suggested.

This course can be changed to fit certain game consoles or even smart phones. The following outlines can be changed for use with other coding systems and game engines as the ideas here are fairly universal in thought, though the assumptions are for PC executables and using the Unity © engine.

The students will also learn about an overall working method called the Integrated Development Environment, or IDE. This is much more than a text editor and a compiler. It is a tool to enhance the programming development process. In the Unity environment it will seem like a great challenge due to the amount of information necessary to create a game. It should be emphasized to the student that, without the IDE, they would have to extensively research all of the different attributes and nuances of the programming language, as well as compiling before they even get started. The IDE provides a framework and brings all of the required features forward for the developer. The IDE is not limited to the Unity language. There are well known IDEs such as CodeWarrior® for the C language.

Prerequisites for this course can change depending on the target level of the students. For an introductory course on programming using game design, elementary knowledge of Linear Algebra and Calculus I or better. For a more advance course, a course on Object Oriented Programming and more advance math like Calculus II or better, as well as physics.

Course Outline

The **FIRST** week of class will cover history and common terms. History can cover game style and content and evolution. It should cover the business side. A quality game can be profitable and a badly designed game can be a disaster. Case studies can be made of companies such as Atari, Nintendo and EA.

Hardware is an additional topic since it is the platform for the game software as well as the conveyance for the HMI, Human Machine Interface. As the hardware capability evolved, it allowed for increasingly sophisticated games to be created. For example, early game controllers are quite primitive compared to the controllers of today. Today's smart phones are also far and away more powerful than early game consoles.

The main assignment this week is a short one to two page essay. It is a case study of a video game. It is actually designed to be introspective. The professor can assign a game to evaluate, though it would be much better for the student to select their own favorite. The paper should focus on the details of game design. The student should consider: What is the most important aspect of the game? What draws you to the game? Why do you continue to enjoy playing it? Answering these questions begin to instill design principles into creating a game.

The SECOND week introduces the chosen game engine. Assuming Unity, programming principles from Java or C# can be employed, especially since these are the background languages for Unity. This week is looking at the example game given in Appendix 1 and understanding how to move around [4], as well as citing parts of the code to understand syntax and function.

The THIRD and FOURTH weeks examine the Unity environment and changing values to a pre made game: including RigidBody, Scripts, and Animations. One thing to note is that scripts are usually independent of one another but there can be a script that is global to the game that can hold various variables in the game. Animations are usually controlled by the Animator in Unity®. The animator works like a film as it jumps to images for sprites making it look like the character is moving while 3D objects usually have a full animation of walking or attacking. Some simple features of gaming AI can be introduced. This may include changing some environment characteristic over time.

Unity uses specific calls to Game objects to allow scripts to modify them in the game. One important aspect is the idea of Vectors. This class uses Vector2 as 2D games use the X and Y axis. For an advanced version of this course, Vector3 may be used for 3D environment and rigidbodies. The vector concept is critical for the physics engine: a force is used to create motions. This includes jumping, running, etc. The game in Appendix 1 demonstrates most if not all needed parts to the project that starts after the labs are finished [4].

In addition to changing values in the game, several functions such as the KeyCode can be covered. Optionally, in an advance class, the KeyCodes could be changed to customize it for the student. This is a popular feature in modern games

The FIFTH week should be a wrap up of all the major topics so far. Additional topics that may be inserted would be adding music, sound effects or color changes. For example, music could be associated with different stages of the game. Sound effects or color changes would be event driven by actions in the game such as contact between elements. Do note that the game in the Appendix 1 has none of this as sound effects and music can be an issue of copyright infringement and various other legal issues. Royalty free sound effects and music can be found on the Unity Asset Store [4]. Such functionality is then built upon later in the course with item pickups and other intractable game objects.

In the SIXTH week, the project is assigned and the labs wrap up with game elements such as: menus, story, and miscellaneous objects. Remaining weeks are devoted to making the project. The lecture then goes into the Game Design Process. Students are encouraged to create a game concept in class. In Game Design almost all of the assets for the game are created at about the same time and can influence one another. The Art inspires mechanics and story, or, the story inspires the art and mechanics. It becomes a design cycle for continuous improvement.

Another topic for this week is the prototype, or proof of concept. Games development often starts like this. When a game design studio creates a prototype for a game they add as much as they can to the game at this level of development. As one business topic for the course, a working prototype is always impressive to game companies as it shows the potential for this game, rather than static story boards and concept art. So, the class project is: a game prototype and how they can pitch it to a company. For this class, learning from experimentation is just as useful as following instructions on a predefined lab. Thus, the labs are intended to develop the necessary tools. The labs are intended not only evaluating the student progress but also to guide the students to create their own game.

In weeks SEVEN and EIGHT, students learn about common art styles, story archetypes and relevant music in games. This week demonstrates that other disciplines are useful to create a game environment and “feel”. This also serves as inspiration for the project. Consider looking at modern game graphics and comparing then to older games. Stylized game art should also be considered. Stylized art makes the game have a timeless feel compared to realistic where it only looks good in a particular era. For stories, learning about the archetypes can help create a story. The hero archetype is common in games along with others such as a racing game or electronic version of a board game or card game. Literature from all genres can be examined for examples of story archetypes. Music conveys certain emotions for the situation. Students should look at various games and movies to identify what the music is causing people to feel at the time [3].

Week NINE looks into game creation. Till now, it has been a bottom-up process to learn the tools. With the tools

established, it is time to begin top-down. Simple games of checkers or tic-tac-toe are very shallow: set of tools (bottom-up) and game design (top-down). Students should examine the depth of the game they want to create, and the range in mechanics and rules can allow for greater variation in gameplay [3].

The TENTH week is focused on skill of the player and game accessibility: the depth. Who is this game intended for? Easy games like tic-tac-toe are simple for everyone to play. We can examine more complex games like Starcraft II © by Blizzard Entertainment [6]. The amount of time needed to understand the single player to the multiple player strategies increases greatly. The game requires more time from its players. Games like League of Legends © by Riot Games [7] can be played by anyone as it is a free-to-play game. However, the mechanics of each character and characteristics of each item at any given time needs to be learned to know how to play it at a much higher competitive level. These are different styles of depth in games.

The ELEVENTH week is a look into the game interface. The interface spans from game menus to the HUD, Heads Up Display. This can range from health percentage, ammunition, supply, map, etc. Furthermore, the interface expands with the items or objects of the game. For example, if a character finds a backpack it could hold items for the player's inventory. The backpack has a common meaning to indicate inventory. The same goes for ammunition boxes or health packs with a large red cross on them. Players know exactly what those items do. The underlying topic for this week is how the game and designer convey information about mechanics and tells the player that something has happened. Being able to communicate events is crucial for players. These include familiar tell of a rocket being fired or the footfalls of an enemy behind them. Being unable to convey this information can ruin the game experience [3].

The TWELFTH week looks into motivation and fulfilment. What does the game do to motivate the player? Is it item discovery or a reward for defeating certain significant opponents? Is it the continuation of the story or unlocking hidden secrets? Students should understand that games should have rewards throughout. This ranges from upgrades to the character to continuing the story. This is reward scheduling. At a given interval of time played or achievements explicitly designed, a reward is given. This encourages the player to know more and want to play the game more. If the game never has rewards the player loses interest in the game [3].

The THIRTEENTH and FOURTEENTH weeks are for completion of the project. On the fourteenth week another essay should be assigned. The student should then be asked to go back to the game they picked at the beginning of the class. They should then apply what was taught through the course and see how it compares to what they found at the beginning of class. This illustrates the difference between their initial impressions of a game and how their views have changed with the class experience.

Game Design Labs

When creating labs for this class whether introductory or advanced programming using game design, many examples and hints are needed. It is quite possible that this is the first time students have seen programming or the first time with Unity ©. So it is important to point them in the right direction. Hints may have to be added to point students in the right direction but not give the answer.

The FIRST LAB focuses on the programming environment and common programming elements. C# and Java should be covered since they are the background languages for Unity. Coverage depends on whether this is a true introductory programming course or a course later in the curriculum. To support the gaming constructs, cover fundamentals of loops, if statements, functions, local and global variables. The particulars of Unity can be incorporated in these examples. The first more advanced concept is the programming object. Unity uses an object system and to change properties students need to understand how to point to the object and change the settings and other parameters. This includes Rigidbody and applying forces to game objects to make them move [4][1].

The SECOND LAB should focus more on Unity. The environment is a bit daunting due to the many different windows and settings. This can be a challenging learning curve. However, as the student masters the IDE, they will discover how much goes into creating a video game. They must specify everything, since they are creating everything in the game. Appendix 1 has examples.

Some game examples may benefit the students as they consider their own game attributes. Current popular virtual reality games are essentially First Person Shooter scenarios. Elements of a game should be identified: game objects consist of the playable character, environment and other characters; animation moves the player within the environment; rigidbodies defines how any object interacts within the game environment. Motion is defined by scripts and sprites. Since the game design project is a 2D format, animation will concentrate on sprites [1][4].

The THIRD LAB is the creation of a simple game common for all students. See the Appendix 1. All parts of the game should be provided and the students can then compile it together. This would involve creation of Game Objects, Animations, and Scripts. The game should be very simple. A platformer game is one of the simplest to make. Other games that could be created are 2D adventure games inspired by the original Legend of Zelda© by Nintendo [5]. The intent for this week to get a feel of how to create Game Objects and then making characters move around in the game world. This lab can be rather free form to what the professor designates as a game. The students can make defined changes to show competency in editing and compiling. This can be considered a sort of midterm project and can take a few weeks if desired [1][4].

The FOURTH LAB introduces Decision making and gaming style artificial intelligence. The goal is to determine how to make an enemy react to a player. This can be simple “if” statements or complex algorithms that gaming Artificial Intelligence uses. It is recommended to use examples of game AI that are found in early video games then expand to the more complex games of today if time permits. A simple game AI may involve an enemy that reacts differently if confronted in a different part of a game: an enemy attacks a weak player but later with a strong/healthy player the enemy runs away in “fear”. Another simple example can be cited again from, Super Mario Bros © by Nintendo. The game has its enemies programmed simply. The first enemy, the Goomba, moves left no matter what, unless it hits an object and turns around. The reason for these very simple gaming AIs is mainly due to limitations in processing power. These styles of game AI are easy to program and teaches the fundamentals of interactions with other game objects. This lab is intended to build upon the previous lab to create a fully functional game. [1][4].

The FIFTH LAB is meant to finish up the game that started in the third lab. This comprises of other game elements including menus, collectibles, story, music etc. This is where students are free to name the game and create a simple story to tell. The intention here is to have a complete package of a game that can be used as a base for them to create their projects.

A possible final lab for the fifth week, or later, may look into subtle parts of the game. This can include music, sound effects, and menus. Music may change with a new scene. Sound effects would signify events such as a collision. The Unity store has sound effects and are inexpensive, from \$1 to \$30 for a larger album of sounds. Menus can be the focus for this lab in order to select various difficulties of the game, going to the options menu, and any other parts that the students want to include [1][4]. The remaining labs are open to the professor to use. It is recommended, however, that the lab time is open to the students so that they can work on their 2D game project.

Additional Topics

Depending on the courses position in the curriculum, or the intensity that is desired, these topics can be added. State machines are of particular interest. For many games, keeping track of the state of the player or other characters in the game is essential. For example, in Super Mario Bros there are various conditions that Mario can be in. There is "Idle" which is his default state where he just stands. Then "running", "jumping", "crouching" and "death" are the primary states for this game. With a state machine the character can assume these different states in response to the player command. Sometimes, certain states are restricted in the flow between states. The reason for this is based on game design and the processing power of the platform (Nintendo NES, for example). For example, while "swimming" is an action, it cannot be immediately adjacent to the other actions. Figure 1 does not cover all possible states but it does cover the core part of these conditions.

Another topic that can be added is the inclusion of sound effects when reacting to a condition. For unity this is just a short script to make the sound happen. You can change the pitch of the sound, the speed and various other factors to make it sound realistic or cartoony just by changing the pitch. The following script does this in an example found on the unity site. There are other ways to do this but this script gets a simple sound initiated inside a game.[4] The script

is self-explanatory, and will become easier to understand once the designer gains experience in Unity.

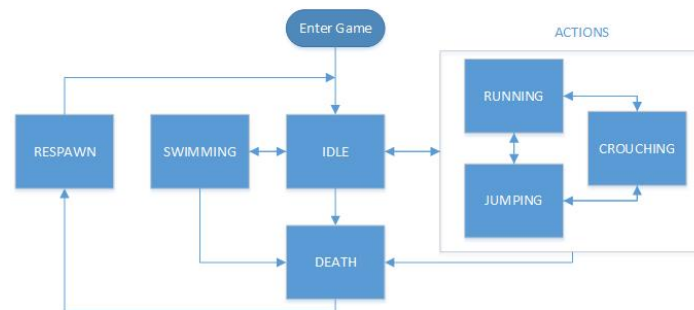


Figure 1: Movement conditions for Mario in Super Mario Bros.

```
using UnityEngine;
using System.Collections;
```

```
public class CrashSound : MonoBehaviour {
    public AudioClip crashSoft;
    public AudioClip crashHard;
    private AudioSource source;
    private float lowPitchRange = .75F;
    private float highPitchRange = 1.5F;
    private float velToVol = .2F;
    private float velocityClipSplit = 10F;
    void Awake () {
        source = GetComponent<AudioSource>();
    }
    void OnCollisionEnter (Collision coll)
    {
        source.pitch = Random.Range (lowPitchRange,highPitchRange);
        float hitVol = coll.relativeVelocity.magnitude * velToVol;
        if (coll.relativeVelocity.magnitude < velocityClipSplit)
            source.PlayOneShot(crashSoft,hitVol);
        else
            source.PlayOneShot(crashHard,hitVol);
    }
}
```

For this example, the simple test game throws a block into other blocks to cause the sound effects to happen. All this does is show mechanics. There are many more nuances of sound qualities that can be covered by this.

Program 1: A Sound Effect Script

Game Design Project

The project is meant to be the course capstone and should be done in groups of two. The students should incorporate all aspects of the class: art, story, and gameplay. Students should be allowed to use the simple game as a base or other examples to create their game for a functioning prototype game and a short presentation for finals week. Students should be asked to focus on mechanics for the game, which needs much work. The mechanics and using Unity are crucial to project success and demonstrating that, the student has a grasp on the programming and how to make a game fun even if it's just a simple idea. Art, music and sound effects can be considered as part of this project, and are easier to include at this level of programming. Purchasing these elements is possible from the Unity asset store. The asset store is filled with royalty free assets from environment to sound effects. Students can use these items if they so choose. Composing these elements is outside the scope of this course.

The complexity of the game is up to the professor to designate. This could span from something similar to Super Mario Bros © to creating a variant of different games. Creativity is paramount. It is also recommended that students create a proposal for what they want to make and the professor should approve this design as long as it fits the guidelines set by the course.

Unity Pricing And Possible Textbooks

A suggested textbook for this course is “Unity Development in 24 Hours,” by Mike Geig [1]. The book is easy to read and steps through the basics of game development in Unity. It has a focus on 3D as 2D was added in Unity 5. The book does cover the 2D development of games. For Unity, students can get a personal edition for educational use while universities can purchase a license through Studica [2]. The license for the school allows the university to produce games and sell them if wanted.

Another book that is very insightful is Designing Games by Tyan Sylvester [3]. The book follows a very informative path through various aspects of game design and contributes to various course suggested topics. Topics include rewarding the player, creating a game with simple mechanics and with a deeper interaction.

CONCLUSION

With the look into C# and using Unity to teach programming basics, new students can be introduced to programming in an engaging way or a student with a few classes under his belt would improve game making skills. The example game in the Appendix 1 is a good starting point. Most, if not all game mechanics for a 2D game is a derivative of this one simple example. Jumping is a derivative of the up arrow with gravity. Collectables are a collider with script to make it disappear when the player's collider touches it and then adds it to the player's resource inventory. This course benefits new programmers and those looking to enhance their game making skills.

Organizations like FIRST Robotics and other competitions use the same principles as this course: working with a team of people of different disciplines to achieve a common goal. FIRST focuses on robotics while this course has a focus on video games. At the core, both are aiming to do the same thing. To teach students to work with teammates and to learn a new technical skill [9][10].

Example Course Weight

Course Assignment & Weight	
<i>Assignment</i>	<i>Suggested Weight</i>
First Week Essay	10%
Final Week Essay	10%
Labs	50% (10% per Lab)
Design Project	30%

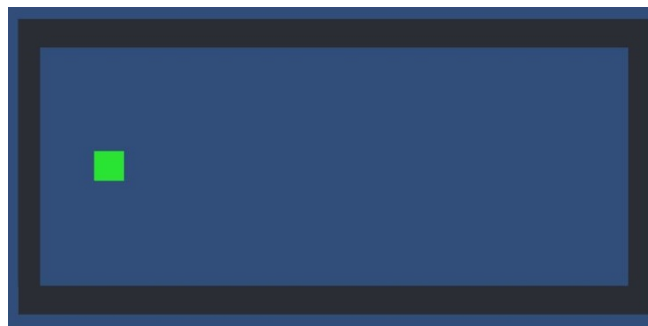


Figure A1. Sample game screenshot when opened in unity.

Appendix 1

This is an example game that is similar to a traditional Hello World program. The program itself is written in C# and Unity [4]. This introduces fundamental structure to the student. When a new script file for a game is opened within the Unity development environment, a number of lines of code for the required framework are generated. The sections are populated by the developer to create the script for a particular game object. The following code is moves the green block in Figure A1, and keeps the green block within the black perimeter.

When a new script file for a game is opened within the Unity development environment, a number of lines of code for the required framework are generated. The sections are populated by the developer to create the script for a particular game object. The following code is moves the green block in Figure A1, and keeps the green block within the black perimeter.

/* The following two lines are required declarations for accessing the unity functions. When a script is created these lines are added along with a few other functions.*/

```
using UnityEngine;
using System.Collections;
```

/*The first line of this next part is generated when the script is created. Player_Green is the name of the script while MonoBehaviour tells Unity that it only has this one script. The lines after that are user defined variables for the script.*/

```
public class Player_Green : MonoBehaviour {
    public Rigidbody2D player;
    bool barrier = false;
    public float maxSpeed = 10f;
    public LayerMask whatIsBarrier;
    public Transform barrierCheck;
    float barrierRadius = 0.2f;
```

/*This next part defines the object known as “player” from above. The Start() is the initialization step.*/

```
// Use this for initialization
void Start () {
    player = GetComponent<Rigidbody2D>();
}
```

/* “FixedUpdate” below updates commands (from user or from the script) at specific intervals. The intervals are called frames. Both FixedUpdate and Update are generated at the time of creation of the script. “Update” is commented out since it is unused in this example*/

```
// void Update (){}
void FixedUpdate () {
```

/*These two lines are an example of moving the block around with the arrow keys.*/

```
float move_x = Input.GetAxisRaw("Horizontal");
float move_y = Input.GetAxisRaw("Vertical");
```

/* In next line, the script checks the blocks collision detection to see if it is against another object, defined as a barrier. In the game this is the black walls.*/

```
barrier = Physics2D.OverlapCircle(barrierCheck.position, barrierRadius, whatIsBarrier);
```

/*This next part of the code is where velocities are added to the block to make it move. This is only one of many ways to move.*/

```
player.velocity = new Vector2(move_y * maxSpeed,
```

```
        player.velocity.y);  
    player.velocity = new Vector2(move_x * maxSpeed,  
        player.velocity.x);  
    }//Fixed Update close  
}//Player Green close
```

Program A1: The Hello World Game Project

Figure A2 below is created with opening the unity script. The green box is actually a 3D object placed on a 2D plane. When an object is created there will be a cube collider (instead of a box collider), no rigidbody 2D, and script. When making the program script you will need to add the script of the object, rigidbody 2D and the Box Collider 2D. It is a common practice to organize the parts of the game into layers for easier manipulation. For example the player is on its own layer called "Player". In the Script block above some variable names are shown. The user then defines the variable "whatisbarrier" to the barrier layer and the barrier check to the GameObject transform. The Barrier Check is looking at a hidden transform that is added to the green box to check for collision detection. This is done by creating a blank game object and then adding it to the Player object.

An important part of this game is that since this object is on a 2D plane, we have to restrict movement of the object into the Z axis. This is done by checking the Constraints part of RigidBody2D.

This is an example of one barrier in the Unity engine. Just like with the player example this one has a Box Collider 2D but no rigidbody. Since there is no rigid body, this object is immobile and the static checkbox is active in the Transform section of this Inspector Screen. These attributes and objects are in a separate layer called Barrier. Note that in the Figure A3 below, the script is looking at the barrier layer. Since it is looking for anything in that layer, Unity knows that the four sided barrier is impassable for the player green box.

Appendix 2

Video games mostly deal with visual components and the most important are the way you animate. In this case for this course, it will be a simple 2D game using pixel art. 3D art can be used for a 2D styled game as that all comes to choice. For this introductory course, it will focus on pixel art as it is the simplest to make and animate.

As we know Sprites are the objects in the world. They encapsulate everything from the player, enemies, and other items. To understand how to animate them we need to understand what the artists does to make these sprites.

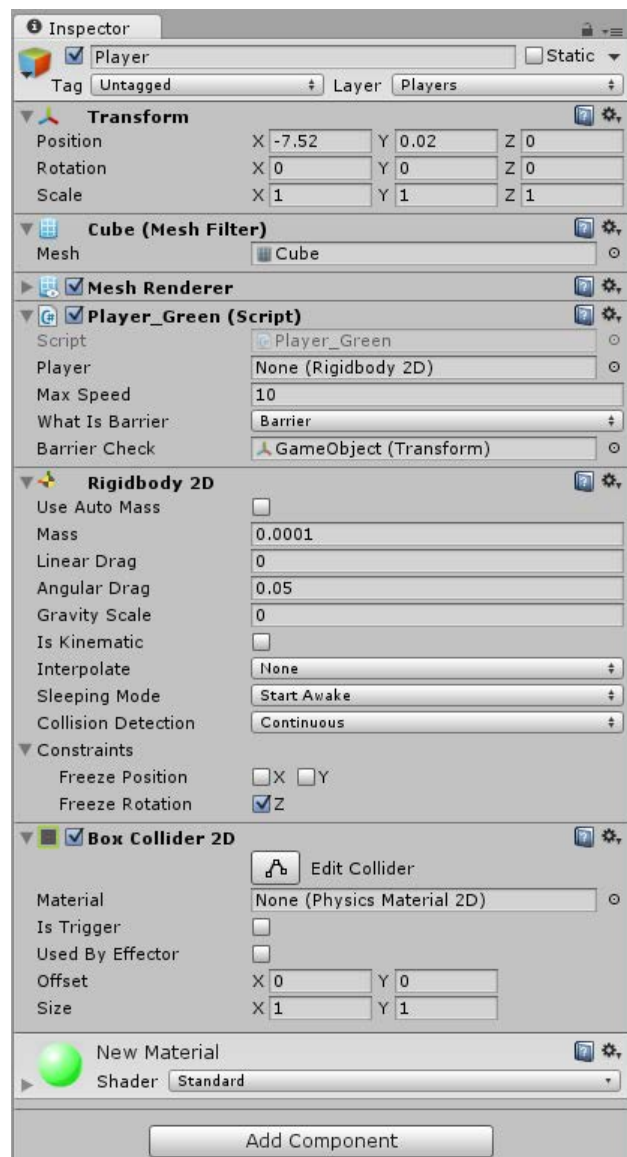


Figure A2. Inspector Screen of the Player object (Green Box)

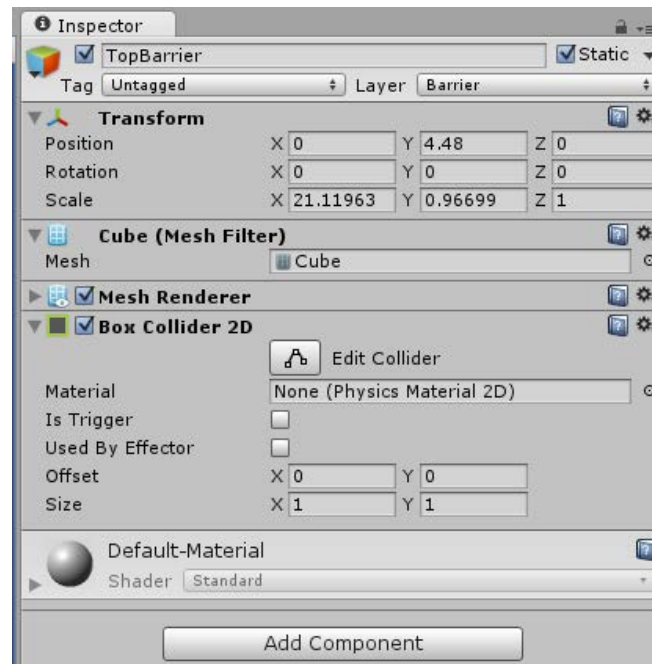


Figure A3. Inspector screen for the barriers (Black Rectangles).

In Figure A4 below, this is an example sheet of both Mario and Luigi. Each section of this sheet composes parts used for that characters animations. The first two colors are used as the primary colors for the Mario Bros. The rest are used for various power ups found in the game, including Fire Flower and the Star. If we focus on the first batch of sprites with Mario's original coloring, we can pick out what parts of this sprite sections is for specific animations. The first part of the sprite sheet is Mario's standing position. This is used when Mario is not moving or jumping. From the game though, he can look either way but there is no other standing sprite. To save room on the game's memory they would flip the sprite. This is a common practice in just about any game that uses sprites. The next three animations is Mario running. To play this you would have to set up the animation to go one after another. The next one is midair jump animation followed by a crouch animation. Most games run at 60 Frames. Though most movies are lower at about 30 Frames. The more frames you use the smoother the animation. But if you get the timing wrong with these animations it can look too quick or off. Though these modifications can be used for effects on the player like a speed boost or slow effects.

With unity they have a built in program that helps handle animations. This tool allows for easy integration into the game. This includes when the animation should be played when certain commands or events are triggered.

Projectiles, enemies, bosses, collectables, and more are all handled this way as well. Having a whole sprite sheet allows the programmer and story board artists know what they can and cannot do.

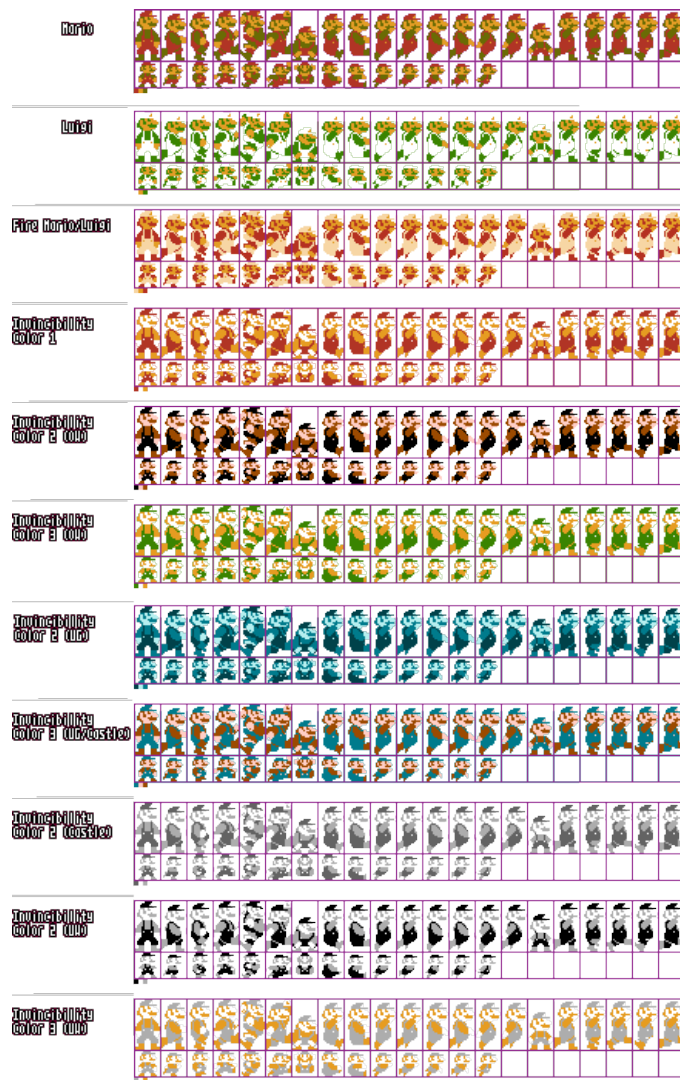


FIGURE A4: Example sprite sheet from Super Mario Bros [5][13]

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Influence Of Instructor's Communication And Student Learning Styles On Success Of Distance Learners

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ABSTRACT

Educators often notice some students possess certain learning traits and prefer certain learning methods. These traits, referred to as learning styles, form a student's unique learning preference and can assist teachers in planning small-group and individualized instruction. Should optimal student learning be dependent on learning styles that vary between distance and equivalent on-campus students then faculty should be aware of these differences and consider altering preparation and instructional methods accordingly. Based on research findings it can be inferred students need to be exposed to a variety of teaching strategies; a variety of learning paths; class activities they can read, visualize, hear, say and do. Additionally instructional guidance can lead to independence, the ability to work alone with appropriate assessment methods, and the technology for independent and guided study. The purpose of this presentation is to better understand student's learning styles and provide specific information about learning style characteristics.

Keywords: *student-learning styles, distance learning, instructor's communication, teaching styles*

Engaging Students In Learning Mathematics Through Interactive And Adaptive Online Real-World Case Studies

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Michael Jennings, The University of Queensland, Australia

ABSTRACT

Fundamental mathematical and quantitative skills are critical for many tertiary students to succeed in their studies and careers. However, we often hear students saying “Why do we need to learn this stuff?” The main reason for this common question is that students often do not appreciate the importance of mathematics due to the lack of authentic, real-world applications in their chosen field of study. Motivating and engaging 21st century students in learning mathematics requires an approach that uses technology-enhanced innovative teaching and learning strategies to blend conceptual mathematical content and captivating, relevant contexts. A number of real-world case studies were developed using Adaptive eLearning Technology to demonstrate the application of mathematics in a wide range of disciplines. Each case study introduces a real-world topic or problem based on a journal article, explains the basic mathematical concepts involved and provides a step-by-step procedure to solve the problem. The Adaptive eLearning Technology provides individualised guidance and instant feedback to students based on their levels of understanding, 24 hours a day, without the need for tutors. Students find the feedback given and the ability to re-attempt questions very beneficial. Specific surveys conducted from 2015-17 indicate that these real-world case studies have enriched the students’ learning and they rate the experience highly.

Keyword: Mathematics, student engagement, adaptive learning, real-world case studies

Determining Safety Culture At A Colliery In South Africa: A Tool For Cost Reduction And Safety Improvement

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ABSTRACT

The aim of the study is to determine the safety culture at a Colliery in South Africa with the intention of identifying the gaps with regard to safety and determine the tools that can be applied to improve safety and reduce safety related costs within the South African mining industry. Frequency tables were utilized to establish the safety culture at the Colliery while the Exploratory Factor Analysis (EFA) was applied to reduce items into nine (9) factors (tools) that can be applied to determine safety culture and cost reduction measures. According to the results; the Colliery was perceived to be compliant and conforms to the requirements of the law, a very positive safety attitude was displayed regarding the importance and application of safety rules and procedures. As a result the Colliery has managed to reduce some of the safety related costs.

Recent Migration To Germany: Economic Salvation Or Societal Destruction?

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ABSTRACT

In 2014, 280,000 refugees came to the twenty-eight countries making up the European Union. By 2015, this number had increased to 1.2 million, most of them trying to reach Germany. This mass migration had been caused by the ongoing Syrian civil war, the expansion of ISIS in the Middle East and the Arab spring revolutions of 2011, which by now had led to civil war in Middle Eastern countries, such as Libya. According to Johannes Hahn, the EU Commissioner for European Neighborhood Policy and Enlargement Negotiations, twenty million more refugees are waiting at the door step.

Why did German Chancellor Angela Merkel open up the country's borders and receive these migrants with open arms? The obvious answer seems to be related to the continued demographic decline of Germany and its economic needs. The number of working age Germans is expected to decline from sixty-one percent to forty-one percent by 2050. Therefore, Germany needs an influx of about 300,000 workers per year until 2060 to keep the current working population level stable. Merkel's policies were therefore not of humanitarian nature but designed to keep the German population at its current level of 82.8 million.

This paper will look at the unexpected socio-economic consequences of the migration of over one million people to Germany and analyze Chancellor Merkel's responses to them.

Leadership Faculty Members Reflect On Their Own Co-Team Teaching Experiences In The Practicum And Internship Course

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ABSTRACT

This study focused on the self-reflections that five co-team teaching faculty members used to improve the instructional delivery process for an internship and practicum course for over a period of five years. Co-team teaching is defined for this study as five faculty members coming together in a positive collaborative relationship to share instruction, experiences and educational leadership practices that enhanced the quality of services to students who were seeking career positions in educational school leadership. By offering students teaching experiences from five different faculty members who have actually served as school leaders at the building and district level gave students a broader perspective as to how effective leadership should look like and how competent leadership practices should prevail in an educational environment. The co-team teaching model illustrated the need for collaboration and teamwork in order to improve instruction in the educational setting and to offer students choices as they selected their own group participation team, topics for discussion and demonstrating how to link their coursework learning activities to real-world application as future school leaders. Major emphases in this study included methods and elements plus values and benefits of co-team teaching, views of faculty and students, experiences of faculty, reflective processes used by faculty, characteristics of students in the study and the impact of co-team teaching in higher education.

Keywords: Co-team Teaching, Reflective Faculty, Teamwork, Collaboration

INTRODUCTION

When faculty members co-team teach they share responsibility for planning, organizing, implementing and evaluating instructional activities (Friend, 2005). Five experienced faculty members in teaching and leadership co-team taught the Internship and Practicum course for School Administration and Supervision for five years at a small university in the mid-Atlantic region on the east coast of the United States. The co-team teaching experience involved a group of faculty members working purposefully, regularly, and cooperatively to help groups of students to gain the needed skills, knowledge and have a professional disposition to be effective in public school leadership practices at the building and/or district level (Roth & Tobin, 2005). Faculty members worked together to set goals for the Internship and Practicum course by designing a syllabus for the course, preparing individual lesson plans, implementing instructional services, evaluating the results and conducting field site visits. Faculty members shared their views, argued with one another in a helpful manner and perhaps even challenged students to decide which approach is best for their learning style using the co-team teaching model and methods (Bacharach, Heck & Dahlberg, 2008). Major emphases in this study were focused on co-team teaching methods, benefits and challenges when co-team teaching, and the importance of being reflective during and after the delivery of instructional services.

Value of Co-Team Teaching

The co-team teaching model was the major method of teaching by participating faculty members based on a survey used in this study. Faculty members who participated in this experience expressed that co-team teaching offers faculty

a broader way of thinking how instruction could be more flexible and diverse based on their own experiences and how to best meet the needs of each student. This method of teaching during this study also created and maintained a community of learners with a focus on using current research practices to improve teaching and learning for emerging school leaders. Faculty members gained a lot from being involved in collaborate co-team teaching, learning and leading such as new methods of teaching by using technology, engaging in interdisciplinary research, valuing the expertise of others, building stronger trust in their collegial relationships locally, nationally and internationally and staying current in their own discipline. Based on research by (Benjamin, 2000), co-team teaching helps to expand students' analytical abilities, connect students and faculty in learning new skills and knowledge together. Co-team teaching also created a strong sense of a collaborative academic and social community plus improved student and faculty relationships academically, socially and culturally (Wassell, 2005). There was clearly support to students and faculty during challenging moments when using the co-team teaching model, but the benefits out-weight the disadvantages. Because of the co-team teaching faculty experiences and modeling effective school leadership practices being shared with students, it was the belief that the learning outcomes were greater for students, academically, socially and culturally. In essence, the co-team teaching faculty themselves have served in extensive leadership positions in public school systems and the university environment and these faculty members were all willing to share their experiences with students when applicable (Kloo, & Zigmond, 2008).

Methods of Co-Team Teaching

When it comes to team teaching, there are many faces, practices or methods of team teaching (Eisen, (2000). Faculty members in this study used a variety of co-team teaching methods such as interactive team teaching where the five faculty presented in the class simultaneously. Second, faculty members utilized the rotational format every fifteen to twenty minutes where faculty members would insert additional information about the topic area. Third, faculty members would observe while the one faculty member was presenting. In this style of teaching there was one teacher at a time implementing the instructional delivery process. This method of teaching was especially helpful at the beginning of a new topic being presented in the internship and practicum course. The observing faculty members would review more and make notes on how to best accommodate students based on what was presented and what students needed to be presented further in front of the class simultaneously. Four, faculty members would be reflective and continue to plan appropriately how they would each team coordinate activities to ensure that the required curriculum was integrated to execute, maximize learning and make connectivity in applying skills and knowledge to real-world application for students in the internship and practicum course (Roth & Tobin, 2005).

The co-team-teaching approach allowed for more interaction between faculty members and students (Murata, 2002). Faculty evaluated students on their achievement of the learning goals. Students evaluated faculty members based on their teaching proficiency at the end of the class during each semester. Emphases were placed on student and faculty growth and development, balancing initiative, sharing responsibility and collaboration, specializing and broadening experiences for all participants in the internship and practicum course. The clear and interesting presentation of content and student development, faculty members lecturing with encouraging discussions among students, using pertinent videos, participation and common expectations, and behavioral learning outcomes based on standards were all part of the execution of activities in class during this five years study.

Working as a team, faculty members modeled respect for differences, interdependence, and problem solving skills in the internship and practicum course. As a team, faculty members would set goals and contents of the course, select common materials related to educational leadership and best practices for all students which helped the team approach to work more proficiently (Bacharach, Heck & Dahlberg, 2010). Faculty set the sequence of topics and supplemental materials based on research articles and topics to enhance student learning of effective leadership skills and practices. Faculty members also used various youtube videos related to effective educational leadership and have students to participate in role playing activities. Emphases were placed on school policies and requirements. A review of pertinent law cases were also discussed in during the course. The law cases discussed were aligned with the appropriate U.S. Constitution Amendments pertaining to teachers and students' rights and responsibilities.

Benefits of Co-team Teaching and Students' Views

The acquisition of skills and knowledge gained by students would differ. Therefore, the timeliness of assignments within the classroom needed to be extended for some students and those opportunities were given. With the co-team teaching approach, students would have the opportunity to receive input from different faculty members who participated in the co-team teaching experience. From observations and data input from students showed that the skill mastery may be more effective when students can see or hear a different perspective of assigned activities by more than one faculty member. With the expertise of five different faculty members was an asset to most students, because these faculty members brought different academic and teaching skills, knowledge, professional disposition and leadership experiences from PreK to 22 to the table in a collaborative manner (Friend, 2009). Each faculty member had an active role to play in supporting students' academic and practical skill development for educational leadership positions (Wenzlaff, Berak, Weisman, Monroe-Baillargeon, Bacharach, Bradfield-kreider, 2002).

However, faculty members understood that co-team teaching does not solve all problems in the teaching environment, but some students may be able to solve-problems quicker because of the added human resources and innovative ideas being shared within the classroom. In the co-team teaching environment, faculty members may become more open-minded about helping students try new ways of teaching and learning a skill and faculty members may also become more creative as they plan, organize and implement more meaningful instructional activities to students that have real-world application Dugan, K., & Letterman, M., 2008. The co-team teaching concept can have an added advantage by incorporating more usage of technology in the classroom and during the field site observations.

Theoretical Framework Collaboration

The history of co-team teaching dates back to 1960s era of progressive education. Working with a more diverse student populations, co-team teaching has made its way into the classroom in a more prominent manner (Bacharach, Heck, Dank, 2003). Therefore, it is essential that the co-team teaching faculty members ensure that their instructional activities are meaningful and relevant for the times so that students are highly prepared for the workforce economy in the area of school educational leadership. It is essential to create and maintain a high quality educational leadership program experience for each student (Eich, 2008). By the co-team teaching faculty working together in planning for student success collaboratively, students benefit from the many different experiences and faces of the faculty and their areas of expertise (Villa & Nevin, 2005).

Co-team teaching creates a collaborative environment which is a plus for many students who are challenged or need accommodations or non-accommodations too, and offers a professional development opportunity for faculty members to grow more proficiently in their area of expertise. Co-team teaching is great for most classroom environments and faculty development. Labs or clinical related classes is an example of how co-team teaching could work best for students in a collaborative setting. Co-team teaching based on theory and research makes it more possible for students to benefit from this form of teaching. Based on a grounded theory, high quality leadership programs must continue to have high quality instructional services to all students. For example, in the work environment, educational leaders must interact with a variety of personalities and leaders at the building and district level plus the community at-large and the co-team teaching and interactions help to prepare students as future leaders to feel more comfortable with their own leadership responsibility when they are working or interacting with a variety of faculty, staff, students, administrators and diverse groups of people at the building or district level and again the community (Wadkins, Miller, & Wozniak, 2006).

Statement of the Problem

There are several implied proposing problems in this type of study. A number of students come to graduate programs in higher education with the need to participate in a variety of experiences when receiving instructional delivery services in preparation for real-world application. Students need to be exposed to teaching from faculty members in educational leadership, especially, those faculty members who have practical experiences and having appropriate credentials in their profession and if this is not a yes then this becomes a problem from the beginning for students experiences in the classroom. In essence, faculty members should be highly qualified and effective as teachers of the subject manner in educational leadership and are able to meet the needs of each student. However, the major problem

can exist when too many faculty members as individuals and as a group do not reflect formally on their own teaching practices in order to improve services to students who are seeking a profession in educational school leadership. Second, the question is, are faculty members as co-team teachers co-teaching in a manner consistent with research related to successful co-teaching elements?

Purpose of the Study

The major purpose of this study was to examine the reflective thoughts of co-team teaching experiences of five faculty members teaching the graduate internship and practicum course for five years. Emphases were placed on planning, organizing, implementing instructional teaching methods, monitoring and evaluating their experiences as co-team faculty members reflectively. Second, the purpose of the study was to see how students viewed the co-teaching experience as an evaluative focus group.

Assumptions of the Study

It was hoped that the participants (faculty and students) in this study answered all of the questions honestly. The responses received from the participating faculty members accurately reflected their own thoughts and professional opinion. The sample is representative of five faculty members who co-team taught at the university in the departments of educational leadership, teaching and learning and professional development who were all highly qualified, competent and effective based on the needs of students. It was assumed that students were honest too, as focus groups, when they expressed their views.

Co-team Teaching Faculty Characteristics in this Study

Among the five faculty members who participated in this study four were full-time tenured faculty and one faculty member served as an adjunct professor. However, all of the faculty participants in this study had taught at the university level from nine to twenty-two years. Four of the faculty members were in the department of educational studies and leadership and one faculty member was in the department of teaching, learning and professional development. Therefore, the interdisciplinary approach was value-added to students' experiences in this study (Creamer & Lattuca, 2005). Four of the faculty members have served as school leaders collectively at the building and district level in three different public school systems for over twenty years with terminal degrees in their field of expertise and one faculty member served as a leader in one school district. The five co-team teaching faculty members have also served as leaders in these areas: department chairpersons, business manager, coordinator for state partnership programs, assistant principals, principals, academic achievement specialist, grant writers, program directors, director of school performance, vice-superintendent and superintendent.

Limitations

This study was limited to one university, five-seasoned faculty members, one course discipline (internship & practicum) and a five-year overview. Participating students enrolled in the course were from four different school districts. A total of N=124 students were enrolled in the internship & practicum course during the five year period. Students taking this course were seeking Certification One status from the State to qualify for an assistant principal's position in a public school environment.

Research Questions

The three major questions below led this research during the study.

1. How do faculty members perceive the effectiveness of their co-team teaching experiences with their peers.
2. How do co-team teaching faculty members perceive ways to improve the instructional delivery process for students?
3. How do co-team teaching faculty members perceive students' thoughts about their experiences with five co-team teaching faculty members in the internship and practicum course?

Positioning Questions to Students

These were the questions given to students as follows: 1). Did participating faculty members in this study show planning and preparation plus knowledge of the course? 2). Did faculty members communicate expectations of the course clearly? 3). Did faculty members use a variety of technology while teaching the course? 4). Did faculty members show enthusiasm while teaching the course? 5). Did faculty members give feedback in a timely manner?

REVIEW OF LITERATURE**Introduction**

Working together in a collaborative manner for the benefit of effective student learning may incorporate the elements of a co-team teaching model. Participating in co-team teaching experience offered students a variety of ways to see how instructional services were delivered in a classroom environment emphasizing school leadership.

For nearly fifty years, co-team teaching has had its presence over the educational landscape. There are advantages and disadvantages to co-team teaching. Starting with the advantages, it is important to show how students can increase their academic and social skills from two or more teaching techniques by faculty members. Second, students are able to receive more help in a co-team teaching classroom especially in smaller groups. Third, students, again, are able to gain more insight from instructional delivery services from the experiences of different faculty members. Fourth, faculty member through additional lenses can observe new ways of delivering curriculum using current standards when team teaching. Fifth, faculty members become more comfortable with working in a collaborative setting and participate in learning communities through professional growth and development (Dahlberg & Bacharach, 2009). Identifying and Addressing the Professional Development Needs of Educators through a School/University Partnership, could also enhance the knowledge of faculty plus added resources could be available to faculty. Sixth, faculty members may feel more comfortable with trying new techniques in teaching especially using technology application that is evidence-based research with the support of their team members when working with sometimes challenged or advanced performing students (Mastropieri & Scruggs, 2004).

Some repeated disadvantages for co-team teaching are having time for planning and citing some confusing thoughts about who will lead the start of the instructional delivery process for the course being taught. Second, some faculty may wish to participate in co-team teaching experiences if they had more time to work together in the same building. Third, faculty may feel that planning with others may take too much time in preparation for class. Fourth, faculty members may feel that their personal authority is being taken away from them as individuals. Fifth, faculty may feel that by presenting expectations and instruction from one or more teachers, students may become confused about the expectations and requirements of the class (Lipsky & Gartner, 1997).

Some classes may not reap student success using the co-team teaching model. Some faculty members' disposition may not fit well in the co-team teaching environment. In order to work collaboratively as a team, faculty members must think and implement the practices of a team where there is an equal partnership not one single individual. In essence, faculty members must "think as a team and act as a team." Some faculty may believe that co-team teaching is too time consuming for planning and executing the current applied curriculum (Helms, Alvis & Willis, 2005). There are many other reasons why some faculty members do not wish to co-team teach because of personality differences, too much work, not feeling comfort with one's own discipline and not being an effective planner. Some faculty members believe that students may become confused, again, with several different faculty members teaching in the same classroom at the same time (Laufgraben & Tompkins, 2004). Preplanning takes a considerable amount of time; therefore, each faculty member participating in a declared level of shared responsibility for the success of the co-team teaching experience must work together effectively to ensure success of all students by their actions as teachers.

Balancing the act of science and art in the teaching profession, there are many benefits to co-team teaching. However, there are some known challenges to this style of teaching for faculty based on research (Friend, 2000). When faculty members are team teaching they may encounter the first loss of personal autonomy and status as to who does what and when, roles overlapping, group relationships could be challenged, inadequate resources such as technology for effective collaboration issues. Again, sufficient time for planning lessons and segmentation of evaluation of each

faculty member individually facilitating the instructional delivery process for the class are all a high level of consideration. Also, co-team teaching can be more expensive than solo teaching, because it may involve faculty taking more time to teach fewer total credit hours in some educational settings at the university (Letterman & Dugan, 2004).

In reference to students, inconsistencies for instructional direction and expectations during co-team teaching could pose a problem to students regarding lack of clarity to class work, expectations and standards, not addressing students' needs by all the participating faculty members teaching the course and how will the evaluation or assessment of students' work will be executed could, again, be prevailing problems. However, with proper planning, organizing, implementing, monitoring and evaluating all student learning activities with clarity by the co-team group could possibly ease some problems that may occur while executing the instructional delivery process in co-team teaching (Helms, Alvis & Willis, 2005). Faculty members participating in co-team teaching could be more reflective of their own practices as they plan student activities while working with a number of students who were seeking preparation and eventually job placement opportunities (Dugan & Letterman, 2008).

Key Elements of Practice in Co-Teaching

There are four major types of team teaching models. Bacharach and her colleagues (2008) discussed seven strategies or models of co-teaching. For the purpose of this study, the authors looked at the four approaches to their co-teaching experiences based on the supportive, parallel, complementary, and team co-teaching. For the interest of definitions the supportive co-teaching is defined as one teacher taking a lead instructional role while the second or more teachers support instruction by rotating, providing one-to-one tutorial assistance or assessing as the other co-teacher directs the lesson with the support of a peer (Birrell & Bullough, 2005). Parallel co-teaching involved both co-teaching partners working with different groups of students in different sections of the room. In this model, each co-teacher eventually worked with each student in the class, through rotation or shifting groups over time. In a complementary co-teaching experience, one co-teacher enhanced the instructional services provided by the other co-teachers (i.e. one teacher paraphrasing what the other co-teacher's statements were regarding course activities or modeling note taking skills during the other co-teacher's instruction). The team co-teaching approach involved simultaneous instruction of both co-teachers where each co-teacher demonstrated being comfortable with taking the lead and supporting activities throughout the lesson based on their particular strengths and knowledge. In each case, the co-team faculty members were aware when it was time for their smooth transmission or input of information during the instructional process (Benjamin, 2000). In team co-teaching, it is essential too, that all co-teachers are viewed as equally knowledgeable and credible (California State University Long Beach Multiple Subject Credential Program, 2012).

At various times during the five years teaching the internship and practicum course, the five co-team teaching faculty in this study used a combination of the four models. However, it was common that the faculty members used more of the parallel co-team teaching model for instruction with groups of four to five students based on topics for problem solving activities and discussions germane to educational leadership for public school leaders. What was key or most important to the co-team teaching faculty was when it was all said and done, it was essential that the instructional delivery process was working for each student (Marzano, Pickering & Pollock, 2001).

Best Practices for Co- Team Teaching Faculty Based on Research

In order to be successful as members of the co-team teaching group, it works best when there is evidence of effective planning, organizing, implementing, monitoring and evaluating student activities. It is important for faculty to identify needed resources for the classroom and students' experiences as soon as possible. Working in a collaborative manner, it is important for faculty members to become acquainted with the teaching style of each participating co-team faculty member. Modeling expectations and rendering support to team members is needed in order to develop and maintain a strong co-team teaching group. Team teaching works well when faculty respects the role and responsibilities of their co-team members. At the end of each teaching session, faculty members of the co-team group should reflect on their effectiveness and seek ways to improve services to students (Greg, Bresnahan & Pedersen, 2009).

Research also shows that successful co-taught courses by faculty members when they use a variety of cognitive strategies and resources as lessons are planned as the norm which could further impact student learning from different

backgrounds and learning levels (Dieker, 2006). Actively involving students and incorporating strategic learning into the classroom are necessary components to help all students find learning a more rewarding experience and student will thrive more in the classroom. Looking at the success of the co-teaching partnerships with other faculty members, may also help co-team teaching faculty to improve their teaching skills based on research (Tobin & Roth, 2006)

Participating Students in the Internship and Practicum Class

After learning more about the background of each participating student in the Internship and Practicum class, the five faculty members planned lessons appropriately in preparation for students to join their school building supervisor(s) in gaining first hand experiences in satisfying the internship and practicum course requirements. Using a collaborative approach for delivering instruction to an average class size of 13 to 18 students, per year, on an average during the five years, most members of the co-team teaching group felt the need to be more reflective of their own experiences for improving the instructional delivery process for all students. The total number of students participating in the Internship and Practicum course for the five-year period was N=124. From various experiences in the co-team teaching model, offered faculty a unique challenge to ensure that contents of the course were current and relevant based on Professional Standards for Educational Leaders 2015. Secondly, based on the marketplace for those students who were seeking certification for school administration, students could benefit from the skills and knowledge of experienced faculty members with leadership practical application who were teaching the course. The five faculty members spent two semesters from (September to the following May) with each group of students in the program. For the very first meeting, faculty members would review and share expectations of the program based on the syllabus, standards and rubrics in the handbook for School Administration and Supervision. The two major signature assessment assignments were the portfolio and research theses paper using APA style and format for input into the Taskstream data system for evaluation at the end of the second semester. The class was held on Thursday evenings meeting face-to-face during the first three years. The last two years, the class was taught face-to-face the months of September and October, during the remaining months in the year, students would meet once a month and Blackboard would be used to post various assignments for single or group projects, interactions and discussions for the rest of each month. The ultimate goal of co-team teaching was to improve student achievement academically, socially and culturally and to prepare students to serve as effective school leaders in the workforce economy (Marzano, Pickering & Pollock, 2001).

Students in the practicum and internship program had several books to read related to educational leadership and leading in general during the academic year. Some of the books were: Discover your True North, Bill George and Leadership 2050: Critical Challenge Key Contexts and Emerging Trends author Matthew Sowcik; Planning and Implementing a Sustainable Strategic Plan authors John M. Bryson, Sharon Roe Anderson and Farnum K. Alston; Grassroots Leadership and the Arts for Social Change authors Susan J. Erenrich and Jon F. Wergin and Building Leadership Bridges - Creative Social Change: Leadership for a Healthy World author Kathryn Goldman Schuyler. After reading the selected books, students had to write a brief book report and present their work in class including the title of the book, introduction, body, analysis and evaluation, conclusion and state why the selected book has real-world application for educational leaders in a school environment or central office administration. All book reports could not exceed five typed pages with appropriate references attached.

The five co-team teaching faculty members as college supervisors for the Internship and Practicum course also shared the responsibility on Fridays and Mondays to visit different school sites to observe students interning in their perspective school during the two semesters annually. During each site visit, students were expected to be participating in actual leadership related activities by demonstrating their leadership ability related to one or more of the twelve itemized topic areas related to *practical exposure to school leadership*. Faculty members would visit each student two or more times per semester to observe each student's progress during the internship. The five faculty members would compose in written form their observations and would collaborate and compare notes based on their observations during their planning period. Feedback would be given to students based on observations and recommendations for improvement within a week after the site visit. Students participating in the internship and practicum program were represented from four different county school systems.

The co-team teaching structure overall included a combination of parallel teaching, alternative teaching and teaming. Using parallel teaching, the five faculty members divided students into four groups and lead the same instructional activities with all four groups. Second, faculty members would use alternative teaching by managing the large group

while the four other teachers would give a specific instructional purpose. Third, faculty members would co-team teach by fully engaging in the delivery of the core instructional delivery services by sharing and leading instruction in front of the class (Walsh, 2012).

During the past five years, the co-team teaching faculty used a variety of structures to implement instructional delivery services as follows: lecture style engagement with discussion, demonstrator or coach style, facilitator or activity style and some hybrid styles when equipment was working. By using a variety of styles of teaching, the five faculty members gave students options many times to select the faculty member and group members with whom they wished to work with regarding a specific planned lesson or activity (Dieker, 2006). What was common among the five faculty members was to give students options in as many situations as possible, but still being able to reach the intended positive outcomes for the course. In each situation while teaching, the five faculty members wanted a case method by providing an opportunity for students to apply what they had learned in the classroom to real-life experiences for school leadership (Harris & Harvey, 2000). The case method further engaged students in active classroom discussions about trends, issues and problems related to school leadership based on well documented research. When topics were relatable to the workplace economy, students were more motivated seemingly to learn and apply information to various assignments (Villa, Thousand & Nevin, 2004).

The five co-team teaching faculty for this study used a combination of models for team teaching. Again, the five faculty members frequently participated in the parallel co-team teaching experience where 18 to 20 students who were divided among five faculty members for instruction and support of various activities in the classroom related to effective school leadership (Wheelan, 2005). The topics for discussion during students' time in the internship and practicum course addressed the twelve items below during the internship experience. These were priorities for developing students' skills, knowledge and professional disposition that would enhance their learning during and after the internship and practicum experiences in a school environment.

Some of the typical topic areas pertaining to relevant leadership in public school settings for discussion and presentations in the classroom, gave students additional knowledge as to what they should know as a school leader. From these experiences for two semesters of each year, faculty members expected students to gain ***practical exposure to school leadership*** by participating in the twelve areas of activities in each category stated as follows:

1. Participating in the school Improvement Initiatives (rationale for contents of school improvement plan)
2. Looking at relevant curriculum and knowing how to construct (master schedules, testing programs, demonstration lessons, and implementing common core standards).
3. Knowing the types of student Support Services within the school district (academic, social and culturally related programs and resources) and activities/services for challenged students and international students. The interns need to know policies pertaining to facilitating effective special education program services to students in a timely manner and completing IEPs online.
4. Knowing how to effectively assist with Human Resources (teacher planning, observations and evaluations informally and formally).
5. Having knowledge of General Administration and Supervision (policies, school law, school procedures and expectations for students, faculty and staff).
6. Demonstrating knowledge in how to manage the School Budget/Finance, Grant matters (expenditures for personnel, supplies/materials and equipment).
7. Finding effective ways to include more Parent Involvement in schools (specific role and tasks for parents).
8. Communicating effectively on Community Relations and Partnerships (communication and relationship building).
9. Demonstrating knowledge of Facilities and Management (maintenance, inspections, building, playground safety and knowing about the advantages of having a green school).
10. Facilitating Professional Development Facilitation (correlation toward improving instructional services by meeting the needs of each student).
11. Identifying technology materials and resources within the school district that would be useful for student use to improve student literacy skills across disciplines.

12. Citing innovative tasks demonstrated in the school or district level environment for school improvement (incorporating the use of more appropriate technology for instruction and management).

After the five co-team teaching faculty members reviewed students' assessment data contained in portfolios, research theses, required readings, demonstrated knowledge of Professional Standards for Educational Leaders 2015, faculty members could clearly see if students were progressing at the expectable level. Faculty members also, expected students to demonstrate their best leadership behavior by having excellent interpersonal skills while observing standards being met. At the end of the second semester, students submitted their two signature assignments for (portfolios and research theses) to Taskstream data system for final evaluation by faculty members finding the average performance level. This type of evaluation and feedback gave the co-team teaching faculty members additional ways to reflect on the quality of services rendered to students as being effectively executed during their course work, internship and practicum experience based on the sum total of students' evaluations by faculty.

Some Common Questions to Ask for Co-Team Teaching

When using the self-reflective journal book or trying to secure feedback from students and peers, perhaps the most difficult part is actually composing suitable questions for improving the co-team teaching process by faculty. A few re-occurring questions were asked and used by faculty members (for self and reflective evaluation) as follows as faculty reflected on their own individual perception of the co-team teaching experience. The reflective questions below were asked among the participating faculty to one another for honest feedback.

Lesson Planning Objectives

1. Was the lesson relevant to real-world application in educational leadership and what improvements would you make regarding some or any of the lessons presented?
2. Did the students gain mastery of the skills and knowledge presented by the lesson objectives?
3. If the lessons were repeated, what should be added to improve those lessons i.e. are more case studies or problem-solving activities needed?
4. Did the lessons include more meaningful reading materials related to instructional educational leadership?

Resources and Materials (co-team teaching faculty must be specific)!

1. Do you think that the materials and resources motivated and engaged the students during the lesson presentation?
2. What resources and materials did we use that enhanced the lesson plan?
3. What resources and materials did we use that could have been improved upon regarding specific lessons especially research expectations and related activities for students?
4. Are there more current resources or techniques that could have been used that are more meaningful to the learning experiences of our students currently?
5. Were all students given a copy and an explanation of the rubric for the course?
6. Were students encouraged to go online to review relevant videos with direction of use of the videos to enhance learning for educational leadership?

Overall Behavior of Students

1. Were students generally on task during each class?
2. With what parts of the lesson plan did the students seem motivated and most engaged?
3. With what portion of the lesson did students seem least engaged such as lecture with fewer discussions?
4. Were students more engaged when they had problem-solving exercises to perform?
5. Were students informed of the various standards for educational leadership practices in the educational environment based on Professional Standards for Educational Leaders 2015 which is now housed at The National Policy Board for Education Administration (NPBEA. 2015) ?

Classroom Management

1. Were the instructional processes and services clearly presented by all co-team teaching faculty?
2. Was the lesson taught at a reasonable pace within the allotted time?
3. Did all students participate in the lesson plan activities in a motivational manner?
4. Would the use of appropriate and available technology have engaged students more in their own learning?

Co-team Teaching Faculty Reflection

1. How effective was overall lesson planning executed?
2. How can the co-team teaching faculty members do it better next time that the course is taught?
3. Did the co-team teaching faculty meet all of the course objectives?
4. How did the co-team teaching faculty members deal with problems that came up during instruction?
5. Was co-team teaching faculty perceptive and sensitive to each student's needs?
6. How was the co-team teaching faculty members overall attitude and the delivery process throughout the class?

The Reflection Processes

Looking at self-reflection during the co-team teaching experience was a process. So the questions stated above gave faculty members the opportunity to truly think about their experiences, quality of services and student reactions. However, the five faculty members discussed what specifics did they wish to reflect on mainly during the reflection process, but the questions gave faculty members some structure and sequence of valuable information to think about during their reflective moments. Members of the co-team teaching group decided to focus on their lessons and the delivery of the lessons, what did students think about the services that they received based on goals, objectives and learning outcomes. The co-team teaching faculty each maintained a self-reflective electronic journal based their reaction of student learning and did an exchange of their own reflections with members of the co-team teaching group. The team members each would also look at lesson objectives, materials, classroom management, and student engagement during the course. Second, looking at student observations of faculty's teaching by having students to complete a survey or questionnaire after each lesson. In this way, faculty can be consistent with how they measure their assessments time after the conclusion of each lesson. Third, peer observations with expertise are invaluable to the co-team teaching faculty, because a school leader can observe and give an honest perspective of the instructional delivery process which is relevant and how it applies to the school environment currently (Badiali & Titus, 2009).

The ultimate goal of self-reflection is to improve the way an individual may teach. Self-reflection affords co-team teaching faculty members to be honest about their performance. During the next teaching experience regarding the internship and practicum class, the co-team teaching faculty will be able to cite ways of how to be more effective when teaching the same course again as a team as they reflect on all the feedback that was given by students during the measurable use of evaluative tools.

Tips for Enhancing the Success of Co-team Teaching

Faculty members participating in co-team teaching instructional delivery services may benefit from the following practices: 1).schedule a standard time for co-planning for the course, 2.) communicate clearly illustrative levels of sharing information and documents for enhancing the delivery of instruction using technology, 3). decide early at the beginning of the semester what major topics will be taught in the class and why, plus who will be the visiting professionals to further articulate aspects of the course for real-world application such as a school leader or principal, 4).clearly communicate what activities that students are expected to cover as a group and as individuals, 5). remind students, again, what to expect when site visits take place, 6). being reflective as to how the course was delivered at the end of the class, 7). ask for input from students to ensure that they feel that students needs are being met and their views are being valued, and 8). let students know that the five faculty members are working together on their behalf. The listed successes of co-team teaching have been communicated in items 1 thru 8 as indicators of what makes co-team teaching work (Bacharach, Heck & Dahlberg, 2008).

How is Success Measured Reflectively in Co-Team Teaching?

Being reflective as a co-team teaching group for the Internship and Practicum course, the four faculty members agreed that these were ways to measure student success as follows: valuing the full student experiences and build upwardly on those experiences, reviewing collected data and making decisions that would improve instruction and management, planning strategically for co-team teaching to improve student retention and progression, and articulating relevant goals and objectives of the course. Communicating course success to the campus and larger communities through media use is very important and a high priority. The importance of infusing information and illustrating effective practices related to educational leadership in planning, organizing, implementing, monitoring and evaluating is a major key to leadership at its best. The major objective, however, is by ensuring that students are able to apply professional and technical skills using Professional Standards for Educational Leaders 2015 as they advance to the next level of job growth in the workforce economy. At the end of the course, faculty members informed students how to secure the Administration and Supervision Certification One Certificate from the State Board of Education. The ultimate outcome is essential that students have gained official knowledge and skills so that they were able to obtain meaningful employment in the field in which the students were trained in educational leadership. Again, it is important to find ways to always improve student performance (Friend, 2010). In order to continue to improve aspects of the course, the co-team teaching faculty would ask graduates of the course for feedback as to their own reflections about their educational learning experiences at the university being linked to relevancy to the workforce economy (Villa, Thousand, & Nevin, 2008).

There is always room for improving services to students through the instructional delivery process. Additional ways to be reflective of their work, faculty members used a series of questions being asked of each other as follows:

1. What worked in the lessons delivered in the Practicum and Internship course? How do we know it worked?
2. What would we do the same or differently if we could re-teach the same lessons in the course? Why?
3. What root cause might be prompting or perpetuating student learning in the course?
4. What do we think as a team about how students learn? How does this belief drive our instructional delivery process?
5. What data do we need to improve decision-making for the Internship and Practicum course for the future?
6. What were the most effective ways in accomplishing new and improved services for the Internship and Practicum course?
7. What are other universities doing to improve their Internship and Practicum course as they connect with local school districts and employers in the workforce economy?
8. How did student participants feel about their experiences in the course as they reflected on classroom work, internship sites and the site supervisor's guidance?

METHODOLOGY

This was a qualitative study at a mid-Atlantic University where five co-team teaching faculty members expressed their perception of the co-team teaching experience while teaching the internship and practicum course for a period of five years. Faculty members looked at the pros and cons about the co-team teaching model and how effectively they thought their performances were and being reflective on how to find more ways to improve their teaching in the future during the co-team teaching experience. During the five years teaching the internship and practicum course, the number of participating students were N= 124. During this study, faculty members completed a survey about their perception and experiences in the co-team teaching environment. A summary of the results are displayed in Figure 1.

Further information in this research study was qualitative data items that were collected by the authors from articles, scholarly journals, official statistics, reference books, library search engines, government reports and acknowledgements of the thoughts of the co-team teaching faculty members' experiences based on their own perception.

Research Design

This study employed research methodology extensively to evaluate the perception of faculty members who participated in this study and to receive input from students based on their experiences in the course. Further, this study incorporated the qualitative research method of study that focused on discovering and understanding the experiences, perspectives, and thoughts/perceptions of participants of five professors who were co-teaching in the internship and practicum course for five years. Data were collected from questions on a likert scale from 1 thru 5 with five being the highest number as illustrated in figure 1. The participating professors who were involved in the co-team teaching experience responded to the fourteen survey questions. The survey questions involved were emailed and collected from a sample of five professors by asking them the same questions and securing responses from them within a week spring of 2017. Plus a few questions were specific for students to answer within several focus groups.

Statement of the Problem

A number of students come to graduate programs in higher education with the need to participate in a variety of instructional delivery services and experiences in preparation for real-world application for educational leadership. The problem is that too many students do not receive instructional services and activities in teaching, learning and leadership from faculty members who have actually served as effective school administrators at various levels in educational leadership, again, with practical experiences and having appropriate degrees in their profession. In essence, faculty members should be highly qualified and effective as teachers of the subject matter in educational leadership in order to meet the needs of each student. Second, another problem can exist when too many faculty members as individuals and as a group do not reflect formally and informally on their own teaching practices in order to improve services to students who are seeking a profession in educational school leadership. Third, are faculty members as co-team teachers participating in co-teaching in a manner consistent with research knowledge based on successful co-teaching elements for higher student achievement (Slavin, 2001)? It is always a priority to improve student achievement at the highest level possibly with highly qualified and effective teaching faculty members.

Purpose of the Study

The major purpose of this study was to examine the reflective thoughts of co-team teaching experiences of five faculty members teaching the graduate internship and practicum course for a period of five years. Emphases were placed on planning, organizing, implementing instructional teaching methods, monitoring and evaluating their experiences as co-team teaching faculty members reflectively. Second, the purpose of the study was to see how students viewed the co-teaching experience as evaluative focus groups.

Assumptions of the Study

The participants in this study answered all of the survey questions honestly. The responses received from the participating faculty members accurately reflected their own thoughts and professional opinion. The sample in this study was representative of five faculty members who co-team taught at the university in the departments of educational leadership, teaching and learning and professional development.

Co-team Teaching Faculty Characteristics in this Study

The five faculty members who participated in this study were full-time, tenured faculty who had taught at the university level from nine to twenty-two years. Four of the faculty members were in the department of educational studies and leadership and one faculty member was in the department of teaching, learning and professional development. Therefore, the interdisciplinary approach of five different faculty members was value-added to students' learning experiences (Creamer & Lattuca, 2005). Four of the faculty members in this study had served as school leaders collectively and effectively at the building and district level in three different public school systems for over twenty years with terminal degrees in educational leadership in their field of expertise. The co-team teaching faculty members have served in leadership positions in these areas: department chairpersons, assistant principals, principals, academic achievement specialist, grant writers, international consultant, peer reviewer for international leadership refereed journals, program directors, vice-superintendent and superintendent.

Limitations

This study was limited to one university, five-seasoned faculty members, one course discipline (internship & practicum) and a five year overview of the course taught. Participating students enrolled in the course were from five different school districts. A total of N=124 students were enrolled in the internship & practicum course for over a five year period. Students taking this class were seeking Certification One Certificate status from the State to qualify for an assistant principal's position in a public school environment.

Sample of Student Participants and Demographic Information

Students participating in the program represented five different school districts. The University has had over a twenty-two year history of preparing individuals for leadership positions at the building and district level for nearby public school systems. The university has continually worked in partnership agreement with local school systems in preparing individuals for leadership positions. The effectiveness of the program was determined based the goals and objectives being completed successfully plus a follow-up to learn about the number of graduates who are serving currently in leadership positions in various public school systems (Braun, Gable & kite, 2008).

Some demographic information about the participating students was as follows: the average age of the participants in the program 28 to 38 at 40%; 39 to 48 at 33% and 50 to 58 at 27%. In terms of race, there were 71 % Black; 23 % White; 4% others; and 2% Latino. The gender distribution was 92 % female and 8% male.

Research Questions

The three questions below led this research during the study.

1. How did faculty members perceive the effectiveness of their co-team teaching instructional experiences with their peers.
2. How did co-team teaching faculty members perceive ways to improve the instructional delivery process for students?
3. How did co-team teaching faculty members perceive students' thoughts about their experiences with five co-team teaching faculty members in the internship and practicum course?

Survey and Data Results

By addressing the Research Questions (RQ), the survey results used in this study were completed by the five co-team teaching faculty members who were officially participants in this study. The outcome results from the survey were given as follows in Figure 1 on a Likert Scale 1 thru 5 with 5 being the highest as illustrated below:

SURVEY Data Collected Fall 2012 thru Spring 2017

Faculty Members Average Input

Figure 1: Perceptions and Reflections from Five Faculty Members based on the three (3) Research Questions	1	2	3	4	5
01. I understood the purpose, goals, objectives that are commonly practiced using the co-team teaching instructional model for the Internship and Practicum course for school leadership. RQ1					5
02. I believe that students learn best in a co-team teaching class. RQ3				1	4
03. I believe that students engage more in classroom activities in a co-team teaching instructional environment. RQ3				1	4
04. I believe that co-team teaching instruction is beneficial to students with different learning styles, diverse background and English as a second language because of appropriate resources and teaching style among the four faculty members. RQ1				1	4
05. I believe that co-team teaching instruction is beneficial to all students who are at-risks of low performance in basic literacy skills in research and writing skills during the internship and practicum course. RQ1					5

06. I believe that co-team teaching instruction is beneficial to all students performing at all different levels academically. RQ1				2	3
07. I think that university committee meetings should not be scheduled during the time of co-team teaching and planning period. RQ2					5
08. I believe that classroom management and instructional delivery services are shared equally among the co-team teaching faculty. RQ1					5
09. I believe that grading students' performance should be equally shared among members of the co-team teaching faculty. RQ2					5
10. I think that accommodations should be made by each co-team teaching faculty member based on the needs of each student. RQ1					5
11. I think that professional development activities have been undertaken at the university to foster collaboration, inclusive practices and co-team teaching. RQ2				1	4
12. I think that administrators need to support more co-team teaching endeavors at the university by ensuring that there is available operable technology in each classroom. RQ2					5
13. I think that administrators set the registration number and need to support the number of students in the co-team teaching classroom. RQ2					5
14. I am overall satisfied with the current co-team teaching model at the university. RQ1				1	4

Analyses

Data were gathered from the five participating co-team teaching faculty members. The resulting data gave a snapshot of perceptions of how five faculty members felt about their co-team teaching experiences at the university as illustrated in Figure 1.

The survey had fourteen perception and reflection statements from the five co-team teaching faculty to complete.

Findings Overall

The suggested findings gave an overall view about the *five co-team* teaching faculty members' perception regarding their own co-team teaching experiences as follows:

1. Works best when co-team faculty members can agree on the instructional delivery process per lesson.
2. Works best when one person does not view the other faculty members as a threat.
3. Is very beneficial to both students and faculty members because of the different experiences of faculty and the varied learning styles of students plus the extra support in the classroom that allows individualized attention to students.
4. Needs more support from the university administrative team i.e. dean, provost and president regarding classroom resources.
5. Needs quality and quantity working technology (computers, printers in the classroom).
6. Needs access to an appropriate classroom in advance before the first meeting date of the class.
7. Should offer more co-team teaching faculty with up-to-date training and professional development using the co-team teaching model.
8. Could help students with improving their writing skills when students are working on research projects such as writing articles and writing theses.
9. Should be encouraged in at least one selected course in each department to participate inco-team teaching because of increasing diverse enrolled students and to address students specific learning styles and individual needs.
10. Encourages the co-team faculty members to work beyond teaching the internship and practicum course in the department of educational studies and leadership, because four of the fivefaculty members have engaged more in working on research-based projects together.

Analyze and Implement Effective Techniques

The collected and analyzed information is very important. The analyzed findings in Figure 1 helped the four co-team teaching faculty to see recurring patterns in number agreement and numbers with less agreeing views. Did the observers or evaluators find any repeated areas action during lesson engagement that needed improvement? The first thing one should look for is any recurring patterns by participants. The number ones that were given by the participant in the study who *is not* from the educational studies and leadership department was recurring. By improving a teaching technique by the co-team teaching faculty could make a difference in students' practical learning experiences with the support of school supervisors as partners during the internship and practicum course (Badiali & Titus, 2009).

The five faculty members see themselves as lifelong learners and they continue to be futuristic visionaries, being active learners in teaching, learning and leading. The co-team teaching faculty members see the co-teaching model as having high workability for the improvement of student learning (Bacharach, Heck, & Dahlberg, 2007).

What did the Four Student Focus Groups Say about Co-Team Teaching?

The co-team teaching faculty members of four were not in the room during the student focus group activity. The use of positioning statements were led by a student leader and a student recorder. Hence students in the four focus groups with four to five students were asked to agree or disagree about a number of statements. It was important that each student participating in the focus group activity was able to identify with one or more of the statements as being important to them as individuals and as a total group for the final statement. In essence, the perspective from students was key in order to learn what their thinking and thoughts were about their experiences in the internship and practicum course. The recorder would articulate the average given statement during the activity which took place the last week of the course. Positioning statements were a variation of the verbal rating scale and was often known as agree/disagree scales or Likert scales after the researcher who popularized the scales historically (Likert, 1932). Typically a statement was read out and the respondents were presented with five choices such as: 1). **Agree strongly**, 2). **Agree**, 3). **Agree slightly** Neither Agree nor Disagree, 4). **Disagree Slightly**, 5). **Disagree Strongly** were the overall rating. This activity was facilitated, again, by student leaders in the Internship and Practicum class which took one hour and a half to complete the focus group activity.

Analyses and Findings from Perception of Student Focus Group Participants

Students viewed the five faculty members as equals based on informal questions to students such as: 1). Q. Did the five faculty members (as a group) show planning and preparation plus knowledge of the course? A. Agree 2). Q. Did faculty members communicate expectations of the course clearly? A. Agree 3). Q. Did faculty members use a variety of technology while teaching the course? A. Agree Slightly 4). Q. Did faculty members show enthusiasm while teaching the course? A. Agree Strongly 5). Q. Did faculty members give feedback in a timely manner? A. Agree Slightly. Students stated in written comments that the classroom should have better working technology.

A Major Concern of Students

The co-team teaching faculty members looked at students' feedback statements. When students independently stated similar information for improvement of the course that was an area that needed attention. Is there anything that students kept talking about in the written narratives during the course was questioned by faculty? Yes, the major concern that students expressed, in this study, repeatedly the need for up-to-date working technology in the classroom. Today, technology tools are invaluable assets to the classroom environment in order to help to facilitate classroom activities. According to Janelle Cox, "around 75 percent of educators think that technology has a positive impact in the education process. Educators also recognize the importance of developing these technological skills in students so they will be prepared to enter the workforce once they complete their schooling" (Cox, 2017, p.1).

Seeking Ways to Improve Co-team Teaching

When addressing the needs of students, the co-team teaching faculty members would listen carefully using data reviews and would make every attempt to plan accordingly with the students in mind. Members of the co-team teaching faculty would discuss the concerns based on feedback from students and ask colleagues for suggestions for instructional improvement (Wiggins, 2012). The co-team teaching faculty would look (for example) at effective team-teaching techniques and list those techniques in their lesson plans for the next class delivery. Some co-team teaching faculty would make inquiries with faculty teaching the internship and practicum course from other institutions within the state about their success using the co-team teaching model.

Impact of Co-team Teaching Model for the Internship and Practicum Course

It was the benefit of the five faculty members that the effectiveness of the co-team teaching faculty model provided an increase in academic engaged time for students, improved evidence-based instructional practices, created a supportive encouraging environments and offered continuous feedback to their students on an ongoing basis. Again, this paper was written by reflecting upon the experiences of five faculty members and university supervisors by making recommendations that could support future faculty teaching using the co-team teaching approach in the Internship and Practicum course. The co-team teaching faculty embraced the need to always strive for continuous development and improvement for instructional delivery services to each student or groups of students who are participating in an internship and practicum experience in higher education (Bacharach, Heck & Dahlberg, 2007).

The major aim in this paper was to highlight the experiences and perception of five co-team teaching faculty who engaged in teaching in the Internship and Practicum course for five years. During the first semester program-wide, the co-teaching implementation was carefully organized and executed to promote improved student learning in preparation for the internship and practicum experience. Co-team teaching faculty participated themselves in consciously listening a lot to students' thoughts, one another and reflecting on their own thoughts and perception about their co-team teaching experiences as illustrated in figure 1.

RECOMMENDATIONS FOR FUTURE PRACTICE FOR CO-TEAM TEACHING

University faculty and supervisors could perhaps benefit in having more knowledge, experience and engagement in new practices based on research in co-teaching and to know more about the complex nature of this construct. The co-team teaching experience could direct faculty to be more innovative in interdisciplinary teaching in different classes in different departments (Haynes, 2002)

Co-team teaching by faculty members offer a true form of diversity for rendering instructional delivery services to a number of students using a variety of media and expertise of human resources to enhance leadership training for students. The role of each department or unit at the university participating in co-team teaching could for example:

1. Seek the reflections and perceptions of a larger population of teachers who are willing to engage in co-team teaching in higher education.
2. Create better infrastructures by the university leadership to support faculty and to ensure that there is working updated technology that would enhance the instructional delivery process and encourage more co-team teaching in various departments through professional growth development training and activities.
3. Communicate clearly expectations for the co-team teaching approach using Professional Standards for Educational Leaders.
4. Work closely with a larger sample of students who are seeking leadership positions in education early.
5. Perhaps have half of the internship experience for students mid-course work instead of near the end of all course work.
4. Use Blackboard more to support the instructional delivery process for more special signature assignments for student projects on Ethical, Transformational, Political and Authentic Leadership.
5. Seek grant funding and provide the opportunity for students to attend and participate in at least one national leadership professional conference during the academic year during the practicum experience.
6. Offer two student development workshops locally on "effective leadership strategies"

- during the academic year.
7. Show examples of successful co-team teaching models, learning and leading communities.
 8. Prepare an electronic toolkit for effective co-team teaching for educational leaders for the department or unit.
 9. Create an appropriate location for faculty co-teams in order to plan effectively for meaningful exercises and activities.
 10. Work with student teachers, as co-team faculty members in the future in the Department of Teaching and Learning who may wish to become effective future teacher leaders and eventually as school leader toward advancing one's own career (Heck & Bacharach, 2010). Faculty members in a collaborative manner need to work closely with student teachers to ensure their success as they participate in student teaching practicum experiences Platt, Walker-Knight, Lee & Hewitt, 2001).
 11. Continue to mentor instructional school leaders as they progress in their careers at the building or central administration office in the school system, by creating learning professional communities to support these individuals. Professional development should be an ongoing practice (Fox, 2010).
 11. Encourage more team teaching in foreign languages, specific needs, science projects or literacy focused curriculum by developing a strategic plan for the Internship and Practicum/clinical courses in different disciplines.
 12. Use more case studies, legal cases, videos and discussions during co-team teaching sessions with permission of all faculty members and students in order to see a broader view of the behavior of both students and co-team teaching faculty members. There are needs to be met by working together to use self-reflection more for effective instructional delivery for course improvement (Roth & Tobin, 2002).

CONCLUSION

Co-teaching can be an enjoyable and productive experience when there is respect for the expertise of each faculty team member, effective planning to ensure student success, rendering instructional delivery services that are relevant, meaningful and purposeful regarding the discipline area. It is crucial to have excellent interpersonal skills with all faculty, students and the university leadership administrative support team. In order to be effective for co-team teaching faculty, it is essential to learn quickly the teaching styles of the co-team teaching group members and to examine the learning styles of students from diverse backgrounds and know more about students current and prior experiences in order to be able to plan instructional activities more appropriately based on the needs of each student. Being a co-team teaching faculty member, it is a must to be honest in articulating the strengths and weaknesses of team members in order to obtain the best performance from each faculty member. Based on the needs of each student when known, the co-team teaching faculty can prepare a personalized educational action plan for effective leadership training for each student during the internship and practicum experience. All planning and the execution of planning must be done with the students in mind (Villa & Nevin, 2005).

It is important too, to ensure that there is a true organizational structure for the co-team teaching faculty experience. It is a priority for the first class meeting with students is to have an agenda schedule of activities for the years, expectations and requirements, class assignments and due dates, tests, projects, grading system, current leadership standards, rubrics and means of communicating or contacting faculty members and student leaders within the class. The number of illustrative examples will also help students to see clearly about what and how to do their assignments that could become models for others to emulate (Cramer, Nevin, Thousand & Liston 2006). Co-teaching in urban school districts to meet the needs of all teachers and learners was the overreaching goal in this study. In order to render effective instructional delivery services to students, the co-team teaching faculty members in this study believe that it is important to listen to one another and to students in order to improve the quality of services to students. Faculty members must also articulate their individual perspectives about co-teaching principles and began to think more deeply about their enactment in the classroom. In essence, it is the belief that the co-team teaching faculty must find out the needs of students early and meet the needs of students with exceptional needs who may benefit from different teaching modalities. All students including exceptional or challenged students exiting educational programs must be well prepared for the workforce economy at the level in which they qualify (Gately & Gately, 2001).

Successful co-team teaching requires the active institutional and faculty commitment of time, resources, and careful planning and the execution of relevant activities for student learning. By doing so, co-team teaching can enhance the

teaching and learning experiences of students and faculty plus fulfill the purpose of university education by helping students to integrate discipline information in meaningful perspectives of more skills and knowledge gained from across the curriculum (Harris & Harvey, 2000). When teaching is all about students, co-team teaching can increase instructional options for all students. The improvement of course intensity and continuity, reduces stigma for students with different levels of skills and increase support for faculty members. Students could have more options if more operable technology is available for use in the classroom too, because students could work at their own pace, connect with other students for discussions locally, nationally and internationally, and perhaps improve student retention during the course of study. Students using technology could master more skills and knowledge in an interdisciplinary manner (Cox, 2017).

Based on research, the effectiveness of quality co-teaching depends on faculty competence, experience in the discipline area, common planning time, which can lead to more consistent and thoughtful implementation of the co-teaching model. Co-team teaching faculty would be willing and able to use innovative ideas and information to improve teaching, leading and learning for school leadership activities. The co-team teaching experiences may expand the many roles that faculty members may practice during the teaching of skills in leadership. The co-team teaching faculty could also expand the opportunity for use of more scholarly research to enhance the internship and practicum course for students who seek to become school leaders in a public school environment (Arreola, Theall & Aleamoni, 2003).

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The Effect Of M-Learning On Student Academic Achievement: A Meta-Analysis Of 47 Studies From Taiwan

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ABSTRACT

The advancement and popularity of mobile technologies have encouraged researchers and school teachers to adopt varied mobile devices, such as mobile phones or Personal Digital Assistants in learning activities (Hwang & Chang, 2011; Rogers & Price, 2009). Several literature reviews on mobile learning (m-learning) have been conducted (e.g., Hung & Zhang, 2012; Hwang & Tsai, 2011; Liu, et. al, 2013; Wu et al., 2012). A recent review conducted by Liu, Scordino, Geurtz, Navarrete, Ko, and Lim (2014), examined 63 studies published on m-learning in K-12 from 2007 to 2012. One of the findings in their review, among others, show that 37% (23 out of 63) studies were conducted in Taiwan. With such a high proportion of publications in the field of m-learning, it is worthy to examine the effectiveness of m-learning on student's learning outcomes in Taiwan. In this study, we performed a meta-analysis to synthesize existing research which investigated the effects of m-learning on student's academic achievement in Taiwan. We adopted "mobile learning", "m-learning", "ubiquitous learning", "u-learning" as keywords and gathered 47 studies that conducted in Taiwan. Next, we transformed their quantitative data into Effect Size (ES). The ES was defined as the mean difference between the treatment and control groups, divided by their pooled standard deviation. The results indicate that m-learning has a higher overall mean ES than other types of instruction (e.g., traditional instruction) on student's academic achievement ($ES=.621$). Moreover, 9 out of 11 moderator variables selected for this meta-analysis had a statistically significant impact on the overall mean ES. These variables were subject area, grade level, type of publication, year of publication, place for applying m-learning, occasions of m-learning, experimental design, instruction for experimental group, and comparison group. The results of this study suggest that the effects of m-learning are more positive than other types of instruction. The analyses of those moderator variables also provided some important suggestions when applying m-learning in the educational settings.

Keywords: mobile learning, m-learning, ubiquitous learning, academic achievement, meta-analysis

The Impact Of Emotional Intelligence (EQ) On Successful Personal Selling And Its Related Requirements Through Effective EQ-Centric Sales Training

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ABSTRACT

In most high level professional selling situations, successful sales professionals often display their relationship building capabilities in creating personal chemistry and productive customer relationships with their clients. In a very competitive business environment, it is often not good enough for sales professionals to be adept at finding new prospects or in closing some difficult business deals. To succeed, they must continually develop and apply their relationship skills through Emotional Intelligence (EQ) in connecting successfully with their clients while seeking to build long lasting quality relationships with them. This research study seeks (1) to reaffirm the extent of EQ as a competency for successful personal selling today, (2) to show how EQ skills for successful selling could be taught effectively in classroom or sales training situations (3) and to explore managerial actions that could be undertaken to provide appropriate EQ-related skills assessment and training methodologies. The outcomes of this research explores how selling organizations could improve hiring processes of sales personnel as well as develop EQ-centric sales training efforts that will increase overall sales force effectiveness.

Project Based Learning Infused In A Teacher Preparatory Program: Promoting Autonomy, Critical Thinking, And Efficacy

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ABSTRACT

Faculty and teacher candidates will provide evidence during a poster presentation that reveal an increase in efficacy and autonomy while employing a project-based learning experience with students exhibiting a variety of abilities.

According to the Buck Institute for Education, project-based learning has its roots in experiential education and the philosophy of John Dewey (Buck Institute for Education, 2015). The Buck Institute for Education defines project-based learning as a systematic teaching method that engages students in learning knowledge and skills through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks (Buck Institute for Education, 2015). To determine pre-service teacher perceptions about project-based learning after implementing a project-based learning experience, data was collected from a questionnaire. The questionnaire comprised of questions that focused on student knowledge and experiences about project-based learning. Seven open-ended questions were employed to qualitatively measure student responses. Participants include current as well as graduates of the undergraduate teacher preparatory program.

Keywords: project-based learning, constructivism, pre-service teachers, efficacy, autonomy

Faculty and current teacher candidates will present findings and experiences from Project Based Learning experiences that have been implemented throughout the teacher preparatory program in a poster presentation format. The skills acquired have positively impacted teacher candidates teaching techniques and readied them for their future careers in education. Information presented will include qualitative data gathered from current and former students enrolled in the teacher preparatory program. Evidence suggests that engagement in PBL experiences have increased teacher candidates self-efficacy for the importance of preparation, classroom presence, efficiency, class management skills, and ability to adapt in the setting of a real classroom working with students of all abilities.

The evidence also supports the notion that teacher candidates feel more confident to work with large groups including children with diverse needs. They gain a better understanding of how to be an exemplary member of a co-teaching team in order to differentiate instruction for all learners. Participants will have the opportunity to participate in conversations with faculty and students that have taken part in the project based learning curriculum.

INTRODUCTION

At a small, private liberal arts college in the northeastern United States, pre-service teachers are presented with a project-based learning experience. Invasion Day is a name given to a learning experience focused on project-based learning, including collaboration and co-teaching. Each semester, an elementary or middle school is invited to “invade” the campus education building to participate in a day of project-based learning. Pre-service teachers, enrolled in numerous education courses, are partnered together and host a project-based learning experience for the visiting elementary/middle school students. Pre-service teachers collaborate throughout the semester to effectively design, administer, and deliver an authentic project-based learning experience. Numerous studies have been completed that explore project-based learning including the impact of learning, benefits, challenges, learning gains, and motivations

(Thomas, 2000). Pre-service teachers project-based research typically examine teacher education institutions as instructional models for project-based learning (Latham & Carr, 2012; Coats, 2007) and narratives of students experiences in learning to integrate project-based learning, usually in a technology-rich environment (Brown & Warschauer, 2006) and/or the science discipline. Teacher candidates are given the opportunity to work in groups of two to four in developing their plan and essential question for the day for the day. Ninety to 150 students from local school districts visit the campus and participate in the project based learning experiences. Faculty from each discipline work collaboratively to provide guidance and assistance throughout the process in ways such as lesson plan format, content knowledge, trial run thru, and co-teaching hurdles. The faculty also engage in cooperative assessment of the overall project and candidate performance. Peer peer interactions are modeled throughout the planning process by the faculty so that teacher candidates may gain a better understanding of strategies that help to formulate a social constructivist culture in the classroom (Vygotsky, 1978).

LITERATURE REVIEW

Teachers' personal theories of learning have long been viewed as having considerable influence on virtually all aspects of teachers' decisions about instruction (Applefield & Huber, 2000-2001). 21st century learning requires the teacher to promote higher-level thinking and develop critical thinking skills. Within the 21st century learning framework, creativity, communication, collaboration, and critical thinking skills are highlighted as essential to success in 21st century life and work (Framework for 21st century learning, 2015). Constructivism is a philosophical framework that permits teachers the opportunity and platform for teaching 21st century skills. Constructivism is an epistemological view of knowledge acquisition emphasizing knowledge construction rather than knowledge transmission and the recording of information conveyed by others (Applefield & Huber, 2000-2001). According to the Buck Institute for Education, project-based learning has its roots in experiential education and the philosophy of John Dewey (Buck Institute for Education, 2015). The Buck Institute for Education defines project-based learning as a systematic teaching method that engages students in learning knowledge and skills through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks (Buck Institute for Education, 2015). The implementation of project-based learning experiences provides teachers with an instructional method that presents students with authentic learning tasks that allow them to construct and acquire their knowledge. At a small, private liberal arts college in the northeastern United States, pre-service teachers are presented with an Invasion Day instructional framework, which situates them in a project-based learning experience. Invasion Day is a name given to a learning experience focused on project-based learning, including collaboration and co-teaching. Each semester, an elementary or middle school is invited to "invade" the campus education building to participate in a day of project-based learning. Pre-service teachers, enrolled in numerous education courses, are partnered together and host a project-based learning experience for the visiting elementary/middle school students. Pre-service teachers collaborate throughout the semester to effectively design, administer, and deliver an authentic project-based learning experience. Numerous studies have been completed that explore project-based learning including the impact of learning, benefits, challenges, learning gains, and motivations (Thomas, 2000). Pre-service teachers project-based research typically examine teacher education institutions as instructional models for project-based learning (Latham & Carr, 2012; Coats, 2007) and narratives of students experiences in learning to integrate project-based learning, usually in a technology-rich environment (Brown & Warschauer, 2006) and/or the science discipline. Few studies have researched pre-service teacher perceptions of the implementation of a project-based learning experience, particularly in instructional framework across all disciplines and content areas. This paper examines pre-service teacher perceptions of the implementation of a project-based learning experience.

Research Questions

The research questions for this study are as follows:

- 1.) How will the preparation for PBL experiences help in your current or future classroom?
- 2.) What did you do learn about yourself during PBL experiences that will/have helped your career as an educator?
- 3.) How did PBL experiences help your current or future presence in the classroom?
- 4.) What did you find that needed to be changed in yourself from PBL experiences to improve your self-efficacy for current or future teaching?

- 5.) During PBL experiences how did your attitude affect your current or future classroom management skills?
- 6.) What did you learn about differentiated instruction for to help your current or future students?
- 7.) How do you think PBL experiences have or will help your ability to teach?

CONCLUSION

Few studies have researched pre-service teacher perceptions of the implementation of a project-based learning experience, particularly in instructional framework across all disciplines and content areas. This poster presentation examines pre-service teacher and faculty perceptions of the implementation of a project-based learning experience.

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Contemplating A Drama Technique As A Tool To Understand The Role Of Individual Perspectives In Cases Of Workplace Bullying And Harassment

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ABSTRACT

In the twenty-first century, the prevalence and negative impacts of workplace harassment and bullying have become a matter of concern in Canada and other countries (Poilpot-Rocaboy, 2006; Lippel and Sikka, 2010). Supporting the validity of the concern, Barling and Hershcovis (2010) argue that the outcomes of workplace aggression on victims are more harmful than the outcomes of sexual aggression. In addition, it has been found that psychological harassment and organizational factors contribute to both increased mental health issues and physical violence (Gabe and Elston, 2008). The effects of workplace harassment and bullying are significant not only from a health perspective but also in an economic loss analysis, as it is estimated that the costs of mental illness amounts to billions of dollars each year in both Canada and the United States (Mental Health Commission of Canada, 2015; Georgakopoulos et al., 2011).

Workplace bullying has been defined as widespread and frequently occurring misconduct (Hershcovis and Barling, 2010; Hudson, 2015; Poilpot-Rocaboy, 2006), the impact of which are varied negative effects on victims and workplaces (Georgakopoulos et al., 2011; McKay and Fratzl, 2011; Hershcovis and Barling, 2010; Poilpot-Rocaboy, 2006). The impact of bullying on an individual victim can be traumatic, resulting in disabling conditions such as post-traumatic stress disorder (McKay and Fratzl, 2011), depression and loss of memory (Poilpot-Rocaboy, 2006). While these victim impacts are often foreseeable, what is less predictable is the negative impact of workplace bullying on bystanders, including co-workers of the victims/targets of bullying (McKay and Fratzl, 2011). In addition, workplace bullying can result in reduced group performance by reducing organizational trust and communication and by increasing fear (Keashly and Newman, 2004).

It is recognized that the identification of workplace harassment and bullying behaviours is, in many instances, a subjective exercise. It is also observed that, even in jurisdictions that have implemented structured responses to workplace harassment and bullying, those responses do not prescribe specific means of addressing the respective legal and organizational justice rights and expectations of the perpetrators, victims or bystanders. It appears that these models do not consider nor address the existence of different perspectives, dependent on individual role, in each of these incidents and the remedies proposed. The authors propose that role is likely to impact perceptions of incident severity and, more importantly, of suitability of remedy.

Readers' Theatre (RT) is a teaching methodology where the participants become the actors (readers) for the script (Fetters, 2006; Savitt, 2010). Instead of reading about a case scenario in a textbook, RT engages the participants by immersing them into the scenario, as it allows the audience to experience the situation/dialogue first hand. This is achieved by having the participants be the characters in the scenario by reading a script. Moreover, the participants reading the script can relate more to the dialogue as they are portraying a role. With minimal props, no staged movements on stage, it eliminates the need to rehearse and hence allows the RT to be conducted with relative ease. It removes any set up time and can be 'performed' in multiple venues (Case & Micco, 2006; Savitt, 2010).

In a typical RT, there will be a thoughtful discussion coordinated by a session moderator following the 'performance' which will help tie in the script along with structuring a meaningful discussion. Participation as a "character" permits individuals to gain varying perspectives on the same situation and then discuss their perspectives with other "informed" participants in a safe environment. This is shown to be especially helpful for difficult topics. The authors propose that adapting such a technique to the issue of workplace bullying and harassment may provide a valuable training tool to assist those responsible for addressing and remedying such incidents, policy development and adjudication.

Keywords: Pension, shared risk, human resources, employee benefits

BIOGRAPHIES

Dr. Adisesh serves as the J.D. Irving, Limited Research Chair in Occupational Medicine and an Associate Professor with Dalhousie Medicine New Brunswick. His research interests lie in the areas of Occupational medicine and workplace health; the recognition, quantification, mechanisms and prevention of adverse effects of workplaces on health; the contribution of workplaces to wellbeing; the effects of illness and age on the ability to work; occupational toxicology and nanotoxicology, occupational respiratory disease and allergy, occupational skin disease; clinical coding. He has introduced the technique of Readers Theatre in his own research work to improve understanding of return to work protocol.

Dr. Mendelson is an Associate Professor in the Faculty of Business at UNB Saint John., where he has served as Assistant Dean and Acting Dean of the Faculty. His teaching and research interests fall in the area of Human Resource Management, including employee engagement, workplace violence and leadership. Dr. Mendelson has published a number of peer reviewed articles in national and international journals. In 2012, one of his publications was chosen as a Highly Commended Paper at the Literati Network Awards for Excellence. In addition, he has been recognized with an Outstanding Reviewer Award by the Academy of Management. Dr. Mendelson has served as a Board Member for WorkSafe New Brunswick and is an active member of his community.

Dr. Rinehart is a Professor of Marketing and Director of Graduate Studies in the Faculty of Business at the University of New Brunswick Saint John. During her tenure at UNB she has served as Director of Cooperative Education, Director of the Electronic Commerce Research Centre and Dean of the Faculty of Business. Dr. Rinehart has also worked with the Provincial Government in a policy development capacity during a 4 year secondment from UNB. Her research interests combine her Psychology and Business backgrounds most recently focusing on perspective in effective communication. She has received a UNB merit award in recognition of her contributions to the institution, named as one of 10 people powering the new economy and an IT hero by Industry Canada. An active member of the community, Dr. Rinehart currently serves as Chair of including RPC, a research and technology organization, and has served as Chair for a variety of other Boards and Commissions including Saint John Energy, Enterprise Saint John and the Saint John Regional Y.

Dr. Van Buskirk is a partner at the Law Firm of Lawson & Creamer. He also serves as a stipendiary instructor in the Faculty of Law at UNB Fredericton and sits as a Adjunct Professor with the Faculty of Business at UNB Saint John. Since his admission to the New Brunswick Bar in 1993, Kelly has practiced extensively in the field of civil litigation and, primarily, in the subjects of labour, employment and human rights. Despite his focus in those fields, Kelly has rounded out his professional experience with work in real estate transactions, corporate and commercial law and criminal trial work. Always maintaining a keen interest in legal issues, Kelly has continued to conduct academic research in recent years in conjunction with Nottingham Trent University in England and colleagues at the University of New Brunswick.

An Investigation Into Differences Between Traditional And Online Student Perceptions Of Recorded Lecture Videos: A Case Study

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ABSTRACT

The use of pre-recorded lecture videos is common in flipped classrooms. The purpose of this research was to explore students' perceptions on the use of recorded lecture videos and to determine if there was a difference between online and face-to-face student perceptions in the use of recorded lecture videos. Specifically considered was (a) the instructional value students placed on the use of recorded videos, (b) did students perceive recorded videos impacted their success in the course. Additional research was conducted to determine if a difference between the perceived value of recorded video lectures between face-to-face students and online students existed. A case study, mixed method approach was utilized. A self-administered survey was constructed to investigate students' attitudes and perceptions regarding recorded lecture videos. The research was conducted at a public university and issued to four sections of an introductory networking course. Three sections were traditional face-to-face classes, and one was a fully online. The results of this study found both online and traditional face-face students reported positive perceptions on the use of recorded lecture videos. Students perceived recorded videos as adding both instructional value and positively aiding them to achieve higher course success. No difference between traditional and online student perceptions of recorded lecture videos was found.

INTRODUCTION

The injection of technology into higher education classrooms has led to a shift from traditional teacher centric, lecture based instruction to a more learner-focused, collaborative, and active-learning environment. Increasing student engagement, both inside and outside of the classroom, is being increasingly viewed as a crucial aspect in student success (Gross, Hoffman, Marinari, DeSimone, & Burke, 2015). Some instructors are employing active learning methodologies to increase student engagement and involvement in the learning process (Cavalli, Nuebert, McNally, & Jacklitch-Kuiken, 2014). One example is the use of flipped classrooms, where the lecture portion of the course is moved outside of the classroom and freeing up class time for active learning activities.

Higher education institutions are facing more and more scrutiny for failing to adequately educate students (McLaughlin et. al. 2014). Students are often distracted, disengaged, and even bored in the classroom.

A concern in higher education is the lack of instructors able to tap into the digital learning style of their students (Schaffhauser, 2016). Educators at all levels face numerous challenges trying to motivate learners in this new era of digital learning. The successful integration of information and communication technology (ICT) into the classroom has created new methods for producing, delivering, and receiving information in today's classrooms (Battacharya & Sharma, 2007).

An increasing amount of research suggests that flipping the classroom can be a viable method for creating an engaging, active learning classroom. Current research doesn't agree on a consistent definition for flipped classrooms. This paper refers to flipped classrooms as the pedagogical design where educators move instruction out of formal class time and use class time for students to actively engage in learning and knowledge construction with the support of technology (Baepler, Walker, & Driessen, 2014). A method employed by flipped classroom instructors is the use of short, recorded video lectures to be viewed by students outside of class.

A key goal for educators is successful student learning. Meeting this goal requires an understanding of how to integrate technology into the learning process and recognition of the challenges and benefits derived from various technologies and pedagogical designs (Davies, 2011). The recent attention given to flipped classrooms creates a need to better understand which technologies and pedagogical strategies are most effective and efficient (Kim, Jung, de Siqueira, & Huber, 2016). This study's purpose was to investigate student perceptions of the use of recorded lecture video. Specifically, a comparison of perceptions between face-to-face students and online students regarding the use of recorded lecture videos. Determining if online students found recorded lecture videos more useful than traditional face-to-face students may further the understanding of the usefulness of recorded lecture videos in traditional, online, and flipped classrooms.

LITERATURE REVIEW

Flipped classrooms, also referred to as “inverted classrooms” or “blended learning”, have many similar definitions. Typically flipped classrooms attempt to free students from in class lecture by providing course content in the form of video-clips which students view before attending class. This inversion allows the instructor to focus class time for active learning activities which deepen students’ conceptual understanding (Roehl, Reddy, & Shannon, 2013). This design flip changes the instructors’ role from “sage on the stage” to the “guide on the side” (Kim, Jung, de Siqueira, & Huber, 2016). The infusion of technology into the classroom shifts the focus from the traditional teacher-centered environment to a student-centered one removing in-class lectures. Knowledge is expanded by scaffolding the pre-class assignment with students actively engaged in practice (Mehring, 2016). Flipped classrooms allow educators to optimize their time and increase educator-student interaction (Moffett, 2015).

The literature on the efficacy of the flipped classroom model is mixed. Some research found flipped learning resulted in students taking a more active role in their learning (Jungic, Kaur, Mulholland, & Xin, 2015), increases student engagement and satisfaction with their learning (Gross, Hoffman, Marinari, DeSimone, & Burke, 2015), allowed students to learn at their own pace (O’Flaherty & Phillips, 2015), and has the potential to increase students’ learning performance gains (Heyborne & Perrett, 2016). Flipped classrooms also provide instructors the opportunity to cover more material in a semester. In a study of upper-level engineering courses taught in both flipped and traditional format, Mason, Schuman & Cook (2013) found the flipped format allowed instructors to cover more material without a compromise in student learning.

Flipping a classroom is not without challenges. The most commonly reported disadvantage found in literature was the increased time and work needed to remodel a course. Educators need to be aware of a significant upfront increase in time to prepare videos. Gilboy, Heinerichs & Pazzaglia (2015) reported that the upfront time to digitize lectures was extensive and recommended instructors get help from instructional designers. Furthering the confusion over the efficacy of flipping a classroom were studies that reported no significant improvement in knowledge gains, and that student perceptions of flipped learning were mixed (Clark, 2015; Wasserman, Quint, Norris, & Carr, 2015).

Flipped classrooms do not require state of the art technology, or technical expertise to be effective (Gross, Hoffman, Marinari, DeSimone, & Burke, 2015). There are numerous technologies available for learning outside of class. Educators can use external sources like Vimeo and iTunes, or they may choose to create their own recorded lectures with tools like Learning Glass and Light Board. Additional options include screen casting applications like Camtasia, Showme, or Powerpoint synchronized with an audio pod cast.

When attempting to determine if flipping is the correct pedagogical design for a course, educators need to consider; the delivery options for the technology being used, whether the technology being used supports the intended learning outcomes of a flipped course, and if the technology being used is the most effective for the class design. When comparing regular, flipped, and simulation-based courses, Davies, Dean, & Ball (2013) demonstrated how technology is integrated into a course makes a difference in student learning. Additional support for careful consideration of technology in the classroom stems from the U.S Department of Education’s (2010) expectation that technology in schools must be regulated and be used in an instructional sound manner (taking into consideration the intended learning and factors that may affect learning).

RESEARCH PURPOSE AND QUESTIONS

The purpose of this study was to examine students' perceptions on the use of recorded lecture videos and to determine if there was a difference between online and face-to-face student perceptions in the use of recorded lecture videos. The first question examined student's perceptions of the use of recorded lecture videos. Specifically considered was (a) the instructional value students place on the use of recorded videos, (b) did students perceive recorded videos impacted their success in the course. The second question was: Is there a difference between the perceived value of recorded video lectures between face-to-face students and online students. The motivation to conduct this study was based on the expectation that online students would perceive greater value in the recorded lecture videos, supporting their usefulness in a flipped classroom.

METHODS

This research used a case study, mixed method approach. A self-administered survey was constructed to investigate students' attitudes and perceptions regarding the use of recorded lecture videos. The survey was conducted at a public university and issued to all students in one of four sections of an introduction to networking course. Three sections were traditional face-to-face classes, and one section was a fully online class. Students were not required to view the videos in any of the four sections. The survey included five closed-ended Likert-scale questions where responses ranged from "strongly disagree", "disagree", "agree", "strongly agree", and "did not use the videos" and were used for quantitative analysis. Each of the five Likert-type questions had follow up open ended questions allowing students to provide feedback. These open-ended questions were used for the qualitative analysis.

Students' Perceptions of The Instructional Value of Recorded Videos

To evaluate the instructional value students placed on the use of recorded videos, three closed ended Likert type questions were included in the post course survey. Results from the face-to-face sections are shown in Table 1, and the results from the online section are shown in Table 2. Each of the three questions had an additional open ended question allowing for student feedback.

Table 1. Student perception of instructional value of recorded videos – face-to-face sections

Items for response	Students' responses (%)				
	SD	D	A	SA	NA
Q1: The Learning Glass recordings added instructional value to the course	0	0	43	47	10
Q2: Watching the Learning Glass recordings reinforced my understanding of the course content	0	0	39	51	10
Q3: The content in the Learning Glass recordings was a good supplement to the other course materials	0	0	35	55	10

SD strongly disagree, *D* disagree, *A* agree, *SA* strongly agree, *NA* did not use videos

N=51

Table 2. Student perception of instructional value of recorded videos – online section

Items for response	Students' responses (%)				
	SD	D	A	SA	NA
Q1: The Learning Glass recordings added instructional value to the course	0	0	80	20	0
Q2: Watching the Learning Glass recordings reinforced my understanding of the course content	0	0	60	40	0
Q3: The content in the Learning Glass recordings was a good supplement to the other course materials	0	0	80	20	0

SD strongly disagree, *D* disagree, *A* agree, *SA* strongly agree, *NA* did not use videos

N=5

Fifty-one of the 55 students in the face-to-face sections and five of the 19 students in the online section completed the survey. Write in responses for questions one, two, and three totaled 11, 9, and 4 respectively for the face-to-face sections with no write in responses to questions coming from the online students. All responses to questions one, two, and three were classified as wholly positive. An example from question one: "They helped support ideas and gave examples to make sure the knowledge stuck", from question 2: "Any questions that needed an immediate answer were answered", and from question 3: "Helped to connect everything".

According to the results shown in Tables 1 and 2, it's clear students perceived the use of recorded lecture videos as adding instructional value to the course. In fact, 100% of the responses from both traditional face-to-face and online students were either agree or strongly agree. Regarding the open-ended questions, responses were again 100% positive for both groups of students. From this it's also clear there was no difference between the traditional students' perceptions and the online students' perceptions regarding the instructional value of recorded lecture videos. Both groups of students found the videos added instructional value to the course.

Student's Perceptions of The Impact of Recorded Videos on Their Success

To evaluate if students perceive recorded lecture videos impacted their success in the course two Likert type questions were included in the post course survey. Results from the face-to-face sections are shown in Table 3, and the results from the online section are shown in Table 4. Both questions had an additional open ended question allowing for student feedback.

Table 3. Student perceptions of the impact recorded videos had on their success in the course – face-to-face sections

Items for response	Students' responses (%)				
	SD	D	A	SA	NA
Q4: Watching the Learning Glass recordings helped me do better on tests and exams	0	7	57	18	18
Q5: Watching the Learning Glass recordings reinforced helped me get a better grade in the course	0	2	32	10	7

SD strongly disagree, *D* disagree, *A* agree, *SA* strongly agree, *NA* did not use videos

N=51

Table 4. Student perceptions of the impact recorded videos had on their success in the course – online section

Items for response	Students' responses (%)				
	SD	D	A	SA	NA
Q4: Watching the Learning Glass recordings helped me do better on tests and exams	0	20	60	20	0
Q5: Watching the Learning Glass recordings reinforced helped me get a better grade in the course	0	0	80	20	0

SD strongly disagree, *D* disagree, *A* agree, *SA* strongly agree, *NA* did not use videos

N=5

Write in comments for questions four and five had 3 and 4 responses respectively. There were no write in comments for either of the questions from the online students. All responses to question four, and five were classified as wholly positive. An example from question four: “It helped clear up some ideas that weren't clear just from what I had in my notes or what was in the textbook”, and from question five: “I think they helped clear up ideas that otherwise might not have gotten cleared up.”

Results shown in Tables 3 and 4 clearly demonstrate students perceived recorded lecture videos had a positive impact on their success in the course. 75% of face-to-face students agreed or strongly agreed that recorded lecture videos helped them do better on tests and exams, compared to 80% of online students. Regarding students' perceptions on recorded videos helping them get a better course grade, 42% of face-to-face students and 100% of online students either agreed or strongly agreed. Write in comments supported these facts as all were classified as wholly positive. Results are slightly mixed as face-to-face students reported somewhat less positive support for the videos helping them do better on exams.

DISCUSSION

This research examined students' perceptions on the use of recorded lecture videos, and examined results to determine if there was a difference between online and face-to-face student perceptions in the use of recorded lecture videos. Specifically considered was (a) the instructional value students place on the use of recorded videos, (b) did students perceive recorded videos impacted their success in the course. Additionally, an examination to determine if there was there a difference between the perceived value of recorded video lectures between face-to-face students and online students was conducted.

Key takeaways were drawn from the data analysis. Firstly, data clearly suggested students perceive recorded video lectures provided instructional value to their course. 100% of both online and face-to-face students positively responded to all three questions regarding the instructional valued added to the course from the use of pre-recorded lecture videos. Further support was gained from student's responses to the three open-ended questions regarding the instructional value of recorded videos. Again 100% of the comments students made were classified as wholly positive.

Secondly, student's perceptions of the impact recorded videos had on their success, specifically on test scores and final course grade, were very positive. Both face-to-face students and online students agreed or strongly agreed (75% and 80% respectively) that recorded videos helped them score better on exams and tests. Additionally, 42% of face-to-face students and 100% of online students reported the use of recorded videos helped them achieve a higher final grade for the course. It was confusing that 75% of face-to-face students reported the videos helped them achieve higher test scores, but only 42% reported the videos helped them achieve a higher final grade. This confusion could be the result of 50% of student's final grade was determined by items other than exams. However further positive support for the use of recorded videos stemmed from 100% of the comments for both questions regarding student success were classified as wholly positive.

The Influence Of Vocal And Physical Attractiveness On The Hiring Decision

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ABSTRACT

This research examines how physical and vocal attractiveness affect impressions of an applicant and whether these impressions are affected by gender or job type. Findings, based on two samples, indicate that individuals with less attractiveness voice and physical were viewed as less suitable job applicants and as possessing more negative characteristics than those others. These negative impressions were pervasive and unaffected by either applicant gender or job type. Specifically, we found that job candidates with an attractive voice or physique were perceived as more extraverted, less agreeable, less conscientious, less trustworthy less competent, less sociable and less recruitable. Results are robust to various sensitivity checks.

Keywords: discrimination, nonverbal, hiring, attractiveness.

Finally, after comparing the results from the both the face-to-face and online students, there did not seem to be support for a difference in perceptions between the two groups. The lack of a difference in perception was somewhat surprising as it was an assumption of this researcher that, because of the lack of personal interaction with an instructor, online students would value the videos more than traditional face-to-face students. Considering results from all the data were very positive, the idea that all students perceive additional review materials as wholly positive could be warranted.

The biggest limitation within this research was the low response rate from the online students. Therefore, further research with a larger data set and an increased response rate are recommended. Despite this limitation, this study found both online and traditional face-face students reported positive perceptions of the value recorded lecture videos had on both instructional value and in helping them achieve higher course success. These results further support instructors who wish to use recorded videos within the context of a flipped class, an online class, or a traditional class.

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Demand Learning In Revenue Optimization

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ABSTRACT

We discuss stochastic optimization problems often arising in the fields of revenue management that involve unknown dependencies between control (inventory level) and random variables (demand), where we lack information about both the demand distribution and the exact form of revenue function. In particular, we consider newsvendor problems in which customer demand depends on the inventory decision for this study. We propose adaptive decision-making procedures that provide the decision which converges to the true optimal solution (the best inventory decision) with demand learning and optimizing revenue iteratively. We also compare it to the situations when the decision maker fails to learn from observed demand data, and hence is led to apply the incorrect model iteratively and discuss the value of information.

Keywords: inventory decision, operations management, decision analysis, revenue optimization, demand learning

Rural Health Care: A Blessing Or Financial Curse

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ABSTRACT

With all the complaints about high costs of health care circulating in the media and other communication avenues, there needs to be some understanding of the source of these costs. In the United States, there is not a system of socialized medicine where the government manages the health care system. Rather multiple factors set the United States' health care at a higher quality and efficiency, and thus a higher price. These factors include the higher priced medical care where patients are offered multiple treatments while in the hospital, patients pay their doctors, hospitals, equipment and pharmaceutical companies higher amounts than in other countries, and our private system of health insurance that requires substantial profit and overhead. Instead of having very basic cement-wall facilities, Americans have access to facilities, like Regional Medical, with beautiful architecture, marble floors, and comfortable rooms containing art work and plants. These benefits come at a price to the patients. Though not all-inclusive, these are some of the main factors influencing the high costs of American health care.

This discussion sets forth specific items, processes and funding sources that impact American health care costs. Specific discussions range from the 2010 Affordable Care Act (ACA) to billing practices and common inventory control procedures. Although Regional Medical is located in a modestly populated urban area, it is probable that a medical facility located in a densely populated metropolitan area would experience a greater impact.

Regional Medical is going through a difficult time, struggling to make ends meet in a poor economy where challenges are being presented from many directions. These challenges include ACA payer reclassification, national political activities to repeal or eliminate ACA, new governmental regulation payer mix that affect payments, and budget cuts to gain efficiencies. Even with these challenges, Regional Medical continues to be one of the leading health care providers in the region and prides itself in providing the highest quality of patient care. Although it will take some time to adjust to the inconstant environment and changing health care industry, Regional Medical continues to focus on the patients first and attempts to keep the region healthy.

The Impact Of Credit Management On Student Accounts At Selected South African Universities

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ABSTRACT

In the past few years, many countries have witnessed significant transformations and reforms in their higher education systems, including the emergence of new types of institutions, changes in patterns of financing and governing. In South Africa, like many other developing nations, the government dominates in financing universities. Since the enrolment in higher education is limited, and most of the students tend to come from relatively financially disadvantaged families, other policy options should be considered for the exclusion of students. Johnstone (2004) noted that there had been a shift in the burden of higher education costs from being borne predominantly by the government, or taxpayers, to being shared with parents and students. This adjustment has placed a burden on universities because outstanding student accounts are increasing as a result on non-payments of tuition fees. It is in light of these increasing expenses borne by students and parents, that universities face a challenge of maintaining higher education accessibility. For instance, student bodies have always objected (sometimes violently) the increase of tuition fees because of the belief that it was accumulating at a rapid rate that might exclude potential and existing students from poorer families.

The results show that South African universities are under great strain with excessive default rates of the student accounts. A fundamental concern is that the outstanding student accounts impact negatively on the financial sustainability of universities. Higher education functions in a complex business environment generating operating and non-operating revenue. Credit offered by universities to students in the way of tuition fees is different from that of a typical business. Management of student accounts receivable resulting from the revenue generating activities is crucial to the financial health of universities. To effect the early conversion of these receivables to cash and minimize credit losses, institutions must maintain efficient credit management policies for managing receivables. What should be noted is the difference in credit management strategies between institutions and from this basis, we can identify the optimum credit management procedure. The aim of this study is to establish the impact and effectiveness of credit management policy on student accounts at South African universities. The study adopted a mixed method research design involving the administration of a structured 1 392 questionnaires to senior students and document analysis at five selected South African universities. Descriptive statistics, frequency tables, exploratory factor analysis (EFA), one-way analysis of variance (ANOVA) was utilized to analyze the data. The results indicate that different policies as communicated to students at the various universities lead to diverse degrees of effectiveness of the credit management frameworks. Recommendations on the findings were made, and the implications for future research were outlined.

Keywords: Credit management; financial sustainability; student accounts defaults; financing universities; cost recovery; student financial exclusion.

Christian College Student Leadership: A Comparison Of Hispanic And Non-Hispanic Students

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ABSTRACT

Growing interest in leadership development crosses over cultures and ethnic groups on college campuses. Demographic projections indicate that Hispanics are the United States' fastest-growing minority group with a projected increase in Hispanics attending higher education. A growing trend in higher education involves colleges and universities to examine educational programs for leadership development among Latino college students and ensure the institutions remain adequate for preparing Latino students for leadership positions post-graduation. The purpose of this study addresses the need to assess college students' perceptions of their own confidence and capabilities as leaders between Hispanic students and non-Hispanic students at a Christian college. This research used the Leader Efficiency Questionnaire (LEQ) to measure the student's confidence and capabilities as leaders. The findings with regard to ethnic differences indicate no significant difference in the level of confidence in the college students' report of their own leader capabilities in non-Hispanic college students than in Hispanic college students. The implications for practice suggest no need for creating leadership training programs specifically for the Latino population of college students when the focus is on identification of building confidence as a leader.

Keywords: Christian college, Hispanic, student leadership, quantitative research

Entrepreneurial Orientation And Firm Performance Of Tourist Accommodation Establishment In Ghana

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ABSTRACT

Entrepreneurial Orientation has recently been recognized as one of the most important influences for a firm's performance. Research has shown that high growth and performance correlates with a firm's entrepreneurial orientation. Emanating from the resource based view, entrepreneurial orientation and firm resources have been identified as essential variables influencing the performance of entrepreneurial firms. Lodging establishments in the Central Region of Ghana are a lucrative long-term investment opportunity, generating revenue and taxes for owners and the state respectively. They also provide direct employment for over 1,800 workers. The livelihood of contracted suppliers of various goods and services also depends on the survival of these facilities. Intense competition from globalization has resulted in increased volatility in business environments worldwide. Inability to adapt to such volatility threatens the survival and growth of entrepreneurial ventures such as tourist accommodation establishments. The repercussions include losses in income and tax revenues, job losses and setbacks in efforts to alleviate poverty, particularly in developing countries. An explanatory survey was carried out to select 113 out of 142 licensed lodging facilities within the study area. The study revealed that managers were highly proactive but exhibited low levels of the other Entrepreneurial Orientation dimensions, particularly competitive aggressiveness and risk taking. It was therefore concluded that being innovative, proactive, taking risks and being an autonomous leader impacts little on financial performance. Therefore, to enhance the financial performance of their firms, key decision makers must be more competitively aggressive by intensifying efforts to outperform their competitors.

Developing An Incentive System For The Public Sector In Saudi Arabia

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ABSTRACT

The Ministry of the Interior in Saudi Arabia is a public sector organization; it provides services for citizens. Employees in the public sector should be stimulated in order to work effectively; therefore these public organizations must develop incentive systems. The objective of an incentive system is to stimulate and motivate employees to work actively, develop self-control and improve their ability.

An incentive system connects the positive duties of an employee to reward; hence once an employee achieves the requirements of an incentive system he/she deserves a bonus.

Fulfilling the objectives of an incentive system requires computer software, because it controls the performance of organization's employees. The researcher had developed software called Developing a program stimulates employees of an organization in order to transfer knowledge, increase activity and self-control, and improve ability of an employee." The software has been illustrated in Global Leadership and Management Conference University of Riverside fall 2015(attached in Appendix 1).

Developing an incentive system for the public sector in Saudi Arabia covers several topics. As a brief summary of the software, the incentives are divided into three categories (Calist Lai, 2009). The first category is direct monetary compensation, the second category is indirect monetary compensation and the third category is an intangible non-monetary incentive. The contents of direct monetary compensation, indirect monetary compensation and intangible non-monetary incentives are considered followed by the methodology of distributing incentives and finally the benefits of an incentive system.

Keywords: Incentive System, Public Sector, categories of incentive system, methodology of distributing incentives, benefits of an incentive system.

INTRODUCTION

The Ministry of the Interior in Saudi Arabia is a public sector organization; the nature of its work is to provide services for citizens without revenue.

Once any employee works without incentive, they work with minimal effort, because they will earn a salary at the end of month; therefore the work does not demand more effort. However, if there is an incentive system, then the attitude towards effort will change, because when an employee exerts more effort then they will earn a bonus.

One tool that stimulates employees to accomplish their best work in terms of value and quality is the implementation of an incentive system. It motivates employees to work on time and actively, and on the other hand it encourages employees to share their knowledge among them (Smith,2001).

The topic of developing an incentive system for the public sector in Saudi Arabia needs computer software that supports the fulfilling of the objectives of an incentive system. The researcher developed software called "Developing a program stimulates employees of an organization in order to transfer knowledge, increase activity and self-control, and improve ability of an employee". It measures the performance of an organization's employees, and should cover all circumstances of organizational duties, so that output of the software will be acceptable and a reflection of employees' performance.

The software has been illustrated in "Global Leadership and Management Conference University of Riverside fall 2015" (attached in Appendix 1).

An incentive system will achieve enormous benefits for an organization.

Incentives for organizational motivation

The Bureau for Development Policy (2006) explains in the conference paper that incentive systems are an important part of organizational motivation and help in understanding the forces that drive the organization. Therefore, organizations must continually seek ways to keep their employees and work groups engaged in their work, motivated, efficient and productive. In order to achieve this, an organization's success should depend on its ability to create systems that entice the best people to work there. In addition, a good incentive system encourages employees to be productive and creative, fosters loyalty among those who are most productive, and stimulates innovation. On the other hand, incentive systems reside within organizations, their structure, rules, human resource management, opportunities, internal benefits, rewards and sanctions etc. Therefore, organizational incentive systems have a significant influence on the performance of individuals and thus the organization overall (Paul, Elisabeth and Marc Robinson, 2007).

Pattanayak (2005) presented three categories of incentives, monetary incentives, tangible non-monetary incentives, and intangible non-monetary incentives. Monetary incentives are provided in two ways, direct monetary compensation and indirect monetary compensation. Direct monetary compensations are salary and commission, and indirect monetary compensations include reimbursement for education, childcare benefits, insurance and paid leave (Calist Lai, 2009). Tangible non-monetary incentives involve the indirect payment of money in the form of tangible rewards such as gift cards, watches, garments etc. and intangible non-monetary incentives include the use of social rewards and task-related rewards. Social-related rewards concern the organization's social practices such as employees being courteous and respectful to one another, and managers recognizing employees for their hard work etc. (Calist Lai, 2009).

Brief summary of "Developing a program stimulates employees of an organization in order to transfer knowledge, increase activity and self-control, and improve ability of an employee"

"Developing a program stimulates employees of an organization in order to transfer knowledge, increase activity and self-control, and improve ability of an employee" represents software; it assists in the application of an incentive system. The objective of the incentive system is to stimulate the organization's employees to work on time (self-control) and actively, develop employees' ability, and share their knowledge among them. An incentive system consists of three parts; part one measures the performance of an employee every workday throughout the year. The performance of an employee will be judged according to how they accomplish their work actively, and with self-control. An incentive system also measures the abilities of an employee once through each month. Part two focuses on the transparent, by which each employee can know their level compared with their colleagues each month. Part three connects an employee evaluation with the criteria of the incentive system that is available in an organization.

The methodology of the software was illustrated at a previous conference. It consists of two parts; part one is input data of activities and self-control of an employee, every workday throughout the year. Types of activities and self-control are stored in the system. In part two, a superior inserts the abilities of an employee according to his skills; these duties apply once every month. The system analyses the input data according to certain calculations. It reveals an evaluation of an employee; the criteria of the evaluation are activity, self-control, abilities and accomplishments of an employee. Each one of the criteria has a weight, and overall weights equals 100%. The result will reflect the position of an employee.

Evaluation of an employee connects with the incentive system of an organization, so any employee who achieves high percentage will deserve a award. Thus, most employees will exert more effort; this develops an organization and it will change the culture of employees.

Categories of the incentives

From the literature review, the incentives revolve around three categories, monetary incentives, tangible incentives and intangible incentives. The duties of the public sector focus on providing citizens with service without any revenue, while the private sector looks for earning value. Therefore, the content of the categories of the incentives differs between the public sector and private sector.

This research discusses categories of the incentives of the public sector. The public sector incentives are divided into three categories. First is direct monetary compensation, second is indirect monetary compensation and third is intangible non-monetary incentive.

Direct monetary compensation

This incentive is paid for any an employee who has the highest evaluation, and they are assigned from their department. Types of the incentives are clarified in the next table.

Table of categories of the incentives

Direct monetary compensation	Indirect monetary compensation	Intangible non-monetary incentive
Attending external course 5 days	An organization pays the reimbursement for an employee according to his/her activity.	An organization celebrates distinction of employees and awards them shields and certifications. An organization shows distinct employee to all employees through a Poster as well.
Attending external conference	An organization pays annual bonus according to evaluation ratio.	An organization awards distinction employees vacation 5 days.
Attending external exhibition	An organization pays basic salary.	
	An organization pays half basic salary for managers of sections only.	

Methodology of distributing incentives

Method of presenting the incentives will be as follows:

Direct monetary compensation

At the beginning of the year, an organization determines a certain number of rewards. It distributes rewards to departments of an organization and managers of the departments know how many rewards they have, so that they assign the employees who have priority (this case is clarified in the paper attached in Appendix 1). At the end of the year, an employee's incentive will be linked with their evaluation. If evaluation of an employee is more than or equal to 85%, then they deserve the bonus. If no one achieves an evaluation more than or equal to 85%, then the reward is cancelled.

Regulation of present direct monetary compensation

- An organization assigns regulations and conditions for presenting direct monetary compensation.
- An organization determines the total number of rewards.
- An organization distributes the rewards to the departments fairly.

- A manager of a department announces to managers of sections how many candidates from each section, in which they get evaluation more than or equal to 85%.
- A manager of each section assigns an employee's priority; a manager of a department must approve the assignment.
- A manager of each section fills in an employee's priority in a table of the reward; the table of the reward is available in software, which follows an incentive system.
- End of the year or any time, evaluation of each employee appears so that a department chooses the required number from employees, who get the best evaluation (evaluation is more than or equal to 85%), regardless of an employee's priority.
- A manager of a department tells a manager of an organization the total number of employees who deserve the rewards.
- If a manager of an organization agrees with the results, they are responsible for the bonuses and compile a list containing the names of employees with the appropriate bonus.
- A manager of an organization approves the lists and is responsible for the bonuses, executing the decision, in which they submit the bonuses in the next year.
- With respect to attending an external 5-day course, it will yield to certain conditions as follows:
 - A person responsible for the bonuses reveals external courses to employees, who win the bonuses in order that they select proper courses.
 - An organization gives an employee a vacation and cash, which includes expenses of the journey except fees of the course, which will be on an organization.
 - The cash will be different; it depends on the rank of an employee, if the rank of an employee is high then the cash will be more (Alshahrani, 2009).
 - An organization expends cash for an employee, when he/she attends the course.
 - A course is not compulsory, but it stimulates an employee.
- With respect to attending a conference or exhibition, anyone who wins this bonus should select the type of event and its location, and an organization compensates an employee according to its regulations.

Indirect monetary compensation

This is an incentive that is paid to any an employee who has the highest evaluation, and they assigned from their department. Regulation of indirect monetary compensation is not applicable to regulation of direct monetary compensation, where a manager of a section selects employees who achieve conditions of regulation of indirect monetary compensation. Regulation of indirect monetary compensation is illustrated in the table of indirect monetary compensation. The method of presenting the reward will be once annually in the next year of the evaluation. On the other hand, if any one deserves three bonuses at one time, then the regulation gives them the best two bonuses instead, so that the regulation prevents providing more than two rewards for any one person. Value of annual bonuses will be a reflection of evaluation of an employee; annual bonuses will change according to the evaluation. The rewards are clarified in table of indirect monetary compensation.

Table of indirect monetary compensation

Description	Evaluation type	Evaluation ratio	Remarks
An organization presents expense annual bonus	Total evaluation	< 70%	All employees
An organization pays annual bonus 3% from basic salary	Total evaluation	>= 70% and < 89%	All employees
An organization pays annual bonus 5% from basic salary	Total evaluation	>= 89% and < 95%	All employees
An organization pays annual bonus 7% from basic salary	Total evaluation	>= 95%	All employees

An organization pays basic salary	Total evaluation	> 95%	All employees
An organization pays half of basic salary	Total evaluation	>= 90%	Managers of sections
An organization pays expenses of staying outside local area 7 days	Active evaluation and self-control evaluation	>= 89%	All employees

Interpretation of table of indirect monetary compensation

- Anyone gets evaluation less than 70%, then the organization suspends the annual bonus.
- Anyone gets evaluation between 70% and 89%, then the organization pays their annual bonus 3% from their salary.
- Anyone gets evaluation between 89% and 95%, then the organization pays their annual bonus 5% from their salary.
- Anyone gets evaluation more than 95%, then the organization pays their annual bonus 7% from their salary.
- Anyone gets evaluation more than 95%, then the organization pays their basic salary one time.
- Any section manager gets evaluation more than 90%, then the organization pays them half of basic salary one time.
- Anyone gets active evaluation and self-control evaluation more than 89%, then the organization pays their expenses for staying outside local area 7 days.

Intangible non-monetary incentive

This is a moral incentive, it has a positive effect that stimulates most employees to do more and carefully. Types of incentives are clarified in the next table. An organization announces moral rewards for employees, who deserve them through celebration; it aggregates all employees of the organization, and the organization affords moral rewards for distinct employees.

Table of intangible non-monetary incentive

Description	Evaluation type	Evaluation ratio	Remarks
An organization presents shields	Total evaluation	>= 90%	A department sends name of distinct employee to concerned department in order to select appropriate shield
An organization hangs booster for distinct employees	Total evaluation	>= 90%	A department sends name of distinct employee to concerned department in order to show distinct employee to all employees through the Poster
An organization provides 5 days' vacation	Self-control evaluation	>= 90%	A department sends name of distinct employee to concerned department in order to make decision on vacation

Benefits of incentive system

- Individual level
 - Incentive system stimulates an employee to increase his/her activity and self-control, and improve their ability.
 - Incentive system represents tool assisting in transferring knowledge among employees.
- Departmental level
 - Incentive system assists in reducing monetary corruption, where a department grants proper reimbursement for an employee.

- Incentive system prevents departmental corruption, where a manager cannot use an employee in personal work.
- Organizational level
 - Incentive system highlights qualified employees.
 - Incentive system imposes appropriate hierarchy on an organization, where editing in hierarchy will be according to necessity, so that the hierarchy will be stable.

CONCLUSION

The public sector in Saudi Arabia works to provide services for citizens without return. Therefore the public sector must motivate employees, and motivation of the employees of an organization requires developing processes that stimulate employees to work hard and honestly.

An incentive system is one of these processes, and it includes regulation. If an employee achieves this regulation, he/she earns a benefit, which could be direct monetary compensation, indirect monetary compensation and/or intangible non-monetary incentive.

The advantages of an incentive system are more than the stimulation. It creates a positive environment; it stimulates employees to work and assists the CEO to plan according to accurate information.

The work of an incentive system depends on software. The objective of the software is to collect data on the performance of an employee, to compare the data of all employees, and identify the best employees of an organization who get the highest evaluation as well. The rewards of an incentive system connect with the results of evaluation that appear in the software, so when an employee achieves regulation of an incentive system they win a bonus.

The researcher developed software called "Developing a program stimulates employees of an organization in order to transfer knowledge, increase activity and self-control, and improve ability of an employee"; it measures performance of organizational employees (attached in Appendix 1).

The benefits of an incentive system are many; some of them stimulate employees of an organization to work hard and transfer their knowledge (Davenport and Prusak, 1998). The other benefits assist a department to reduce corruption, and on the other hand, it highlights qualified employees.

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Appendix 1

Developing a Program Stimulates Employees of an Organization in Order to Transfer Knowledge, Increase Activity and Self-Control, and Improve Ability of an Employee

ABSTRACT

A knowledge management concentrates on transferring and sharing knowledge, developing the work environment, improving the culture of an organization, increasing its revenue and improving its processes, and achieving customer satisfaction.

The research creates a program that assists an organization to achieve the principles of knowledge management. The program uses Excel software to evaluate the employees of an organization, while the evaluation focuses on five criteria; activity rate, self-control rate, ability rate, exceptional ability rate, and accomplishment rate of an employee. The program uses the data, which a manager then enters into the program in order to calculate the required rates; the required data are limited and mentioned through the program, and the manager selects data from them that can clarify the employees' situation.

The program has been applied in Center of Developmental Projects (CDP) in Saudi Arabia, and it has many benefits; it evaluates the employees of an organization continuously day-by-day throughout the year; hence, the employees accept the program. It stimulates the employees to work hard, and to produce high quality work. The Evaluation system in the program stimulates the employees to transfer knowledge as well as to exert more time to improve their abilities. The work environment becomes attractive, the employees become tactful with their managers, and accept their directions. They also work together as a team, as well as introducing new ideas.

Keywords

Activity rate, self-control rate, ability rate, exceptional ability rate, accomplishment rate, evaluation rate, stimulation, the employees, knowledge management.

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NOTE: any one looks for paper of "developing a program stimulates employees of an organization in order to transfer knowledge, increase activity and self-control, and improve ability of an employee", he/she can connect with University of Riverside, which had organized Global Leadership and Management Conference.

Effective Risk Management Education For Building Organizational Resilience

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ABSTRACT

This research aims to present effective way of risk management education for organization members to enhance organizational resilience (robustness to risk). In order to increase the resilience of the organization, it is necessary not only to construct risk management system systematically, but also to risk management training (on-site training) to individual organization members. For this reason, through case studies and interview surveys for persons involved in corporate risk management and community disaster prevention education, we identify the characteristics of risk management education that actually builds organizational resilience and the factor of effective educational method.

In Japan, a lot of discussions have been made on risk management and disaster prevention ways in many discipline after the Great East Japan Earthquake. These researches point out the importance of risk management and disaster prevention, present frameworks for risk management system based on PDCA cycle and clarify factors that inhibit effective risk management system. While pointing out the importance of risk management system, there is no useful knowledge on how to educate organizational members about risk management and disaster prevention. This research can show certain direction to effective way of risk management education for organization members.

We consider the process of organizational resilience building as fusions of management system and human effort 1) to reduce damage scale of disaster, 2) to accelerate recovery action implemented, 3) to complete recovery quickly. Therefore, we think about building organizational resilience through education for organization members, using the case of the Great East Japan Earthquake and the interview surveys for people engaged in restoration and reconstruction from the disaster.

A Guideline To Address Barriers In The Physical & Built Environment Of Students With Disabilities: A Case Of A Historically Disadvantaged University

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ABSTRACT

Connections for Community Leadership pointed out that disability is the product of the physical, organizational and attitudinal barriers present within various sectors of society contributing to exclusion; hence the recognition of the need to address barriers within each sector in order to promote educational access and equity.

Against this background, and also noting with concern that institutions of Higher education in South Africa are not purposely built to accommodate students with disabilities, this study was undertaken as a case study to develop a guideline that focussed on addressing barriers in the physical and built environment of a historically disadvantaged institution of higher education. To achieve this purpose, an assessment of the conditions of the built and physical environment was carried out. This was also complemented by the assessment made by participants from the Disability Unit of the institution in the case study using check-list and closed and open-ended questionnaires which allowed the soliciting of qualitative testimonies as well. These tools were modelled along the key areas of the Social Model of Disability. The identified barriers include inaccessible and unsafe physical and built environment as well as poor sanitation conditions.

Finally, the guideline intends to identify the necessary key areas of barriers and to provide a range of actions and recommendations that may assist institutional managers and policy makers in education in their policy formulation and implementation regarding inclusion of students with disabilities.

Keywords: Guideline, barriers, physical and built environment, reasonable inclusion, historically disadvantaged university .

A Study Of How Corporate Culture Impacts The Transfer Of Technology In International Joint Ventures

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ABSTRACT

International Joint Ventures (IJV) have been formed for a variety of strategic reasons. A majority of them are focused on business expansion with means to increase capabilities and resources. Though many studies have been conducted on the most efficient technology transfer methodologies, very few have been published emphasizing the influence culture plays. This study focuses on the process of production method, technical specialization, and organizational systems in IJV.

The influence of corporate culture in technology transfer should not be ignored. In fact, it plays an even more critical role when considering the manufacturing process and technology because longer time is required for business teams to establish or merge their cultures. It becomes essential to form a “joint culture” as well as a joint venture.

This study takes into account how corporate culture influenced the formation of the New United Motor Manufacturing, Inc. (NUMMI), a joint venture between Toyota and General Motors spanning 25 years. As the joint venture between the world's top two automobile companies, NUMMI has received international attention since the late 80s until its closure in 2010. One of Toyota's main contributions to NUMMI were its production methods and technologies, which had been well adopted and contributed fabulous results. However, unique challenges arose because of the culture gap between Toyota and General Motors. The research herein attempts to explain the relationship between technology transfer and corporate culture. It explores the development of production methods, technologies, technology systems and corporate culture of NUMMI over the past 25 years.

The Effectiveness On Subsidizing Program For The Energy-Efficient Home Appliances In Taiwan

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ABSTRACT

Promoting the investment on the energy-efficient home appliances has been one of the policy tools frequently used to reduce the energy consumption. The policy is viewed as a win-win measure because it also has the effect to overcome the externality problem. However, the existence of the argument of energy efficiency gap has led the decision-maker to use incentive programs as instruments to encourage consumers purchasing the energy-efficient products. (Gillingham et al. 2009)

During the period between Nov. 2015 and Feb. 2016, Taiwan government launched a subsidizing program for the energy-efficient appliances to counter the economic recession. The program grants direct cash rebate to consumers who bought the energy-efficient products including air-conditioner, refrigerator, TV, gas stove and water heaters. The program subsidizes 1.4 million set of products and around US\$85 million.

The purpose of this study is to examine the effectiveness of the program to promote the purchasing of energy-efficient products and to counter the economic recession. By using the survey data randomly collected from those consumers who joined the subsidizing program, our results indicate: (1) about 65% of respondents would still purchase the energy-efficient products without the subsidizing program; (2) about 23% of respondents would delay the purchases of energy-efficient products if there is no such a subsidizing program; (3) about 7% of respondents would purchase the less energy-efficient products and about 4% of respondents would delay and purchase the less energy-efficient products if there is no such a subsidizing program. Overall, the results show that there is a free-rider effect underlying the subsidizing program. Furthermore, the subsidy program has little effects to boost the economy.

Keywords: subsidizing program, energy-efficient products, free-rider effect

The Impact Of Social Media On The Selection Process

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ABSTRACT

This case study examines the impact of social media behavior on an organization's brand image. Social media's increased prevalence, and the content of user's personal posts, is creating concerns for managers and organizations. The case discusses an example fraternal organization whose Board must address several recent controversial social media posts by organizational members. While most fraternal organizations focus on philanthropic ideals as their purpose, many also must combat the brand stereotypes that depict these groups as party organizations in TV shows and movies, such as "Animal House". Like businesses, fraternal organizations are increasingly facing the challenge of ensuring that members' personal social media posts are consistent with the image and ideals desired by the organization. Carefully establishing and enforcing policies and procedures for personal social media use is a legal gray area coming under increasing scrutiny. The case discusses how organizations review and oversee members' personal social media posts, and how they can legally and ethically manage those members' activity. The case specifically focuses on how organizations use social media activity in the screening/selection process, and how they establish and enforce policies and procedures to discipline members for social media activity.

Keywords: Social media, Organizational image, Selection

Incorporating Globalization Into The Business Education Curriculum

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ABSTRACT

The phenomenon of globalization has been an economic force for centuries. Its impact has, however, accelerated in recent decades thanks to many technological factors. This paper contends that, like ethics, globalization should be integrated into business courses across the curriculum to prepare students to compete in the employment marketplace and to be effective leaders.

Keywords: Globalization, business curriculum, educating business students.

THE HISTORY OF GLOBALIZATION

While globalization is often referred to a contemporary or modern phenomenon, its history spans centuries, even millennia. The increasing amount of literature on the subject leads many to conclude it is a recent development. Another factor which may have led to the popularity of the topic is the fact that a prominent educator gave it a catchy name. The author credited with applying the term to the phenomenon is Theodore Levitt, a longtime professor at the Harvard Business School (Levitt, 1983). Professor Levitt passed away in June 2006. Obviously, globalization did not begin in 1983. Even though the phenomenon was not “named”, many economists argue that the phenomenon of globalization has been with mankind for a long time. While he never actually used the term, when Adam Smith in the *Wealth of Nations* discussed economic development his underlying principle was the integration of markets, one very important dimension of globalization. Others argue that the phenomenon of globalization began in the 1500’s with the fiscal impact of an influx of 150 tons of silver from the new world by the Spanish and the Portuguese (The Economist, 2013). At the time, the European monetary system was silver based so this massive flood of capital had a significant impact on the European economic system, and was, therefore the first significant event in the global flow of capital between geographies.

However, to convincingly argue the importance for globalization to be a significant element of the business curriculum, it’s not important to determine when globalization began, but it is very important to define what it is, to discuss current trends that tend to establish that its importance is accelerating, and to assert why and how educators can include globalization to prepare business students for success in the employment marketplace.

DEFINING GLOBALIZATION

Globalization is a familiar and highly debated term for every reader, but for the purposes of this paper, we’ll need a collective understanding and precise definitions of these terms.

This proves to be no easy task, as it seems many authors with differing attitudes weigh in on this topic. In researching the subject, this writer could identify over 100 scholarly definitions of globalization. One comprehensive and generally accepted definition by a noted economist contends that globalization is the integration of countries through the increasing flow of goods, services, capital, and labor (Stiglitz, 2002).

Although globalization may be controversial and imprecisely defined, we can categorize its elements. The A.T. Kearney and Foreign Policy annual index of globalization the elements that define globalization as economic integration, personal contact, technological connectivity, and political engagement (A.T. Kearney, Foreign Policy, 2006). Economic integration includes international trade and foreign direct investment; personal contact consists of

telephone, travel, and remittances; technological connectivity is measured by the number of internet users, hosts, and secure servers; and political engagement involves participation in treaties, organizations, and peacekeeping.

Another organization that attempts to measure globalization is the KOF Swiss Economic Institute (KOF Swiss Economic Institute, 2017). The factors used in their research are economic, social, and political like the research previously cited. The index studies 207 counties for the period 2004 through 2014.

The Organization for Economic Cooperation and Development (Organization for Economic Cooperation and Development, 2010) also studies globalization, although it does not publish statistical indices. The factors they include are trade and investment, technology and knowledge, multinational organizations, and value chains. Note that the topic of value chains is not included in the other research.

In summary, globalization involves complex economic networks of competition, resources, and markets that transcend national boundaries, cultures, and business practices. Therefore, globalization is multidimensional, having societal, political, economic, legal, and even technological dimensions. It follows then that the phenomenon of globalization has a significant impact on market competition and structure; resources and supply chains; legal, regulatory, and political considerations; human resources; and even technology. This means, that to prepare future leaders, globalization should be an element of every course in the business curriculum.

GLOBALIZATION IS ACCELERATING

How can we quantify the recent drivers of globalization? The indices are one measure but they have limitations. The OECD research does not include an index, the A.T. Kearney Index is computed by city and the KOF data is by country so composite trends are difficult to assess.

Friedman in his book *The World is Flat* offers an intriguing approach to studying the pace of the phenomenon. He identifies so-called “flatteners” which have led to increased international competition: geopolitical treaties, the internet, software standards, outsourcing, offshoring, supply chains, insourcing, search engines, and “steroids” such as internet telephony, wireless, and travel. (Friedman, 2006). Anecdotal data also provide insight into this trend:

- We tend to think of the United States as the world leaders in globalization, but China now is the leading trading partner with twice as many companies as the United States (Khanna, 2016).
- Internet Connectivity is another factor which accelerates globalization. One-half of the world population now has access to the internet. This ranges from a low penetration rate of 28% in Africa to a high of 88% in North America (Internet World, 2017).
- Fiber Optic connectivity is also enabling globalization growth accounting for slightly over 20% penetration among OECD countries. Japan has the greatest penetration (75%), and the United States is lagging with 12% (Organisation for Economic Co-operation and Development, 2017).
- Transportation is another key driver. Shipments by ocean going container vessels now account for 90% of the world's food, energy, and products. There are now 86,000 container ships in operation around the world (Glassman, 2013). Costs have dramatically fallen as well. For example, in 2016 it cost \$400 to ship a forty-foot container from Shenzhen to Rotterdam, while as recently as 2013 the cost was over \$1,000 (Flexport, 2017). Air travel and transport have also had a significant impact. For example, to travel from Europe to the United States by sailing vessel involved a journey of months, while today it's a matter of hours.
- The composition of the workplace is also changing dramatically. According to the United States Government Bureau of Labor Statistics (BLS), the cultural and ethnic composition of the workforce continues to change dramatically. In 2014 non-white, non-Hispanic workers comprised 23% of the workforce. The BLS projects that by 2024 this will increase to 40% (Bureau of Labor Statistics, 2017). According to the Pew Research Center, in 2015 25% of the workforce were immigrants or the children of immigrants. This is expected to increase to 34% in 2035 (Pew Research Center, 2017). In highly technical workforce such as Silicon Valley, thirty-seven percent of Silicon Valley's population are non-citizens who entered the U.S. to fill a specific job in the tech industry (Silicon Valley Institute for Regional Studies, 2016). Additionally, nearly three-quarters

— 74 percent — of Silicon Valley-employed computer and mathematical workers ages 25 to 44 are foreign-born. The obvious implications for business students and educators are that whatever their background, they will need the skills to be able to manage, lead, and interact with an increasingly diverse workplace.

- Controversial issues related to globalization include immigration, foreign trade and foreign trade agreements, impact on income inequality, uneven effect on emerging countries, the transfer of jobs to lower cost economies, exploitation of workers, use of tax havens by larger corporations, inappropriate influence on the political process by businesses, theft of intellectual property, imbalances in consumption of resources, spread of dangerous communicable diseases, among others (Collins M. , 2015). These trends are further evidence that globalization is an important topic for business educators.

IMPLICATIONS FOR EDUCATORS

Globalization is now more important as an academic theme for the entire business curriculum if students are to be prepared for success in the 21st-century employment marketplace. Students must understand and be able to apply skills and abilities that are important to become an effective leader. Rather than argue the pros and cons of the phenomenon, they must understand the trend, and learn a balanced perspective. Educators may expect students to have been influenced by the media and by their studies in other courses, and they may have strong opinions on the topic. Business educators need to present an impartial perspective, and stress that the phenomenon has been evident as a force of economics for centuries, deal in facts, acknowledge students' differing points of view, and fairly introduce, debate, and discuss the subject. Two excellent resources for assigned reading would include the afore mentioned *The World is Flat* (Friedman, 2006), and *The Next Global Stage: Challenges and Opportunities in Our Borderless World* (Ohmae, 2005).

While universities are adapting to the need to incorporate globalization into their educational programs, there appears to be no consensus as to the optimal way to accomplish this need. American universities have responded by accepting substantial numbers of foreign students and do offer a growing number of courses in a wide range of international subjects. But they have only started to comprehend the volume and velocity of global connections, and have not gone nearly far enough to integrate globalization into the curriculum fully (Dirks, 2005). Research supports this contention, showing that the undergraduate curriculum is not preparing most students to be capable global citizens (Reimers F. , 2013).

Institutions need a strategic approach to addressing this problem. They can establish and empower a team consisting of faculty with the best experience in international and global areas. The team should be across disciplines and the team working with institutional leadership and should follow the traditional approach to curriculum development: goal setting, auditing, curriculum development, benchmarking, and assessment. This process should begin with agreement on a definition of what knowledge their student population needs to acquire to be successful in the global environment. The learning outcomes (knowledge, skills, and competencies) embodied need know only to be understood and learned by students, the students need to be able to apply them in the workplace. Rather than design and create special classes, majors, or programs these learning outcomes should be infused into existing classes and majors in the existing curriculum.

Institutional leaders must integrate global education into the undergraduate curriculum. This will prepare undergraduate students for the twenty-first century through acquiring and being able to apply the knowledge, skills, and competencies they urgently need to engage as global citizens (Reimers F. M., 2014).

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Beyond The Walls: Using Blogging To Expand The Classroom And The Boardroom

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ABSTRACT

Blogging has become increasingly popular as a way to communicate and discuss. Today's blogs vary widely, depending on their purpose; but, whatever form they take, they have been found to be useful. Classroom blogs, for instance, have been shown to help students develop their writing skills (e.g. McGrail & Davis, 2011), their social studies knowledge (e.g. Blankenship, 2016), and their science knowledge (e.g. Sawmiller, 2010), among other things. And blogging has become just as useful in the business world (e.g. Berkley, 2012).

There is little doubt about the value of blogging, whether for educational or business purposes. The challenge many face is creating an effective blog. This workshop is designed to help participants harness the power of blogging. Topics covered will include choosing the blog's focus, branding it appropriately through theme and appearance, and deciding on its content. Participants who do not currently have a blog, but would like one, will leave this workshop with their own blogs and the skills needed to use them effectively. Participants who have blogs will leave this workshop with a clearer vision of their blogs' purpose, and the skills needed to focus their blogs more effectively.

The workshop's facilitator, Margot Kinberg, is an author and Associate Professor with three decades of experience in higher education, and eight years of experience as a successful blogger.

***NOTE:** Participants are strongly encouraged to bring their own laptops or tablets to the workshop, as there will be a limited number of laptops available in the room.

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Use Of Engaging Student-Created Posters To Explain Fundamental Scientific Concepts

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ABSTRACT

The goal of this assignment was to create a fun and interactive exercise in which students were encouraged to create an engaging and informative poster describing aspects of Immunology in a course that utilized Team-Based Learning (TBL) as its sole pedagogy. Teams were assigned differing subjects relevant to an upcoming exam, and each team was asked to create a poster describing the subject matter utilizing TV characters, superheroes, or other caricatures. Rubrics used to grade the final posters were included in the original assignment, providing information on how the final poster would be graded based on its accuracy, completeness, presentation style, originality, and the ability of the poster to serve as a teaching tool to fellow students. During the class period in which the final posters were due, the sole application exercise was a gallery walk, in which teams of students worked together to evaluate and grade posters from fellow students according to the rubrics, providing students with the opportunity to learn from one another. This application exercise was utilized on three separate occasions over a two-year period to cover lymphocytes, leukocytes of innate immunity, and diseases of the immune system. Positive feedback was received from students regarding the poster exercise, and the posters also served as an excellent recruiting tool for applicant candidates that were not familiar with TBL, as examples of student creations from application exercises generated positive feedback from visiting applicant candidates during the pharmacy school interview process.

Keywords: TBL, poster, drawing, caricature, Immunology

Student Experiences Of An Online Metacognitive Journaling Assignment

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ABSTRACT

The growth of online higher education programs, along with increasing numbers of non-traditional students enrolling in college, have required educators to find new ways of meeting the changing learning needs of their students. One possible strategy for facilitating success for online college students is fostering students' engagement in self-regulated learning (SRL). The purpose of this paper is to discuss student perceptions of an online metacognitive journal assignment designed to promote SRL. Following a brief review of related literature, the research describes students' perceptions of a series of metacognitive prompts provided through a weekly online journaling assignment. The students' perceptions of the journal assignment are examined using descriptive statistics and a thematic analysis of their responses to experiential questions posed about the value of the assignment. Implications for the increased use of metacognitive journaling in online higher education settings are discussed.

Accounting For Goodwill: Still Crazy After All These Years

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ABSTRACT

For more than fifty years, goodwill has captured the fascination and frustration of accounting theorists. This analysis examines the changes in treatment of goodwill from the sixties to the present. Its purpose is gain further insight into one of the most interesting puzzles in accounting theory.

Allocating University Administrative Costs In A Responsibility-Centered Management (RCM) Model

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Clemense Ehoff, Jr., Central Washington University
Kenneth A. Smith, Central Washington University

ABSTRACT

In a recent paper, we discovered that there are budget winners and losers made when universities allocate revenues based on a simple combination of student credit hours and number of majors. This is especially true when university administration costs are allocated to academic colleges based on a percentage of revenues. Fortunately, there may be a fairer way to do these allocations.

We introduce accounting students to the RCM budget model and provide them with a scenario based on actual events. In the case, we focus on the issues dealing with university administrative costs allocation.

Teacher Recruitment And Retention

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Catarino Rodriguez, Bernarda Jaime Junior High School, USA

ABSTRACT

With today's high stakes accountability ratings in education, the focus can tend to stay fixated on test scores, curriculum and instruction. However, one key responsibility that may have less emphasis placed upon it, but has a direct impact on curriculum and instruction, is the recruitment and most importantly, the retention of good teachers. Teachers are the backbone of the campus. These are the same individuals who determine if instruction is delivered at an effective and rigorous rate. They are the ones who provide interventions to help struggling learners reach their true potential. These educators work hand in hand with the principal to ensure that the campus reaches new heights for the current year. These are the same individuals that principals must work diligently to recruit as well as retain. There are many key factors that can lead to a teacher's departure. One major factor teachers cite for leaving is lack of support and lack of training. It is vital to the survival of the school to keep teachers wanting to come to work each day and wanting to return each year.

A National Science Foundation-Sponsored Scholarship Program In The College Of Engineering At Utah State University

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Laurie McNeill, Utah State University, USA
Robert Spall, Utah State University, USA
Paul Barr, Utah State University, USA

ABSTRACT

The National Science Foundation (NSF) of the United States has established Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program to increase the recruitment, retention, student success, and graduation of academically-talented students in STEM disciplines. Through a competitive process, institutions of higher education across the country apply for grant funding from this program to provide financial support to these students at respective institutions.

This presentation focuses on a description of an S-STEM program in the College of Engineering at Utah State University (USU), a public research university in the western U.S. Recently funded by the NSF, the program aims to provide S-STEM scholarship support for academically-talented, financially-needy engineering students, and to train these students to become effective scientific and technological contributors when entering the engineering workforce. To date, the program has involved 12 scholarship recipients in the first year of the project, 26 in the second year, and 26 in the third year. Each student receives an S-STEM scholarship for up to three or four years, depending on the remaining balance of the program funds. A multi-disciplinary collaboration has occurred among faculty members from three departments in the USU's College of Engineering: Department of Engineering Education, Department of Mechanical and Aerospace Engineering, and Department of Civil and Environmental Engineering. Advisors from the College of Engineering have also been involved in this program.

This presentation describes major components of this program and associated activities, including 1) student recruitment and selection, 2) student design competition in a local community event, 3) industrial guest speaker series, 4) an S-STEM teaching seminar, and 5) problem-based learning and project-based learning in relevant engineering courses. Student assessments on selected program activities are also included in this presentation.

Keywords: Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) Program, undergraduate engineering education, multi-disciplinary collaboration

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Using Computer Simulation And Animation To Improve Students' Problem Solving In An Undergraduate Engineering Dynamics Course

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ABSTRACT

Engineering dynamics is a fundamental and required course in many undergraduate engineering programs, such as mechanical, aerospace, and civil engineering programs. This course deals with kinematics and kinetics of a particle as well as kinematics and kinetics of a rigid body. To succeed in dynamics, students must not only have a solid understanding of concepts in dynamics, but also have strong spatial visualization and problem-solving skills. However, many students do not have such skills. When they are provided a dynamics problem to solve, many students cannot visualize how the object involved in the problem moves in the 3D space and cannot understand how the forces acting on the object affect its motion.

To improve student learning in this critical undergraduate course, a variety of hardware and software tools, such as hands-on physical experimentations, video games, and computer simulation and animation (CSA), have been developed. Among these tools, CSA receives increasing attention in the international community of engineering education. Research evidence shows that a well-designed CSA tool not only helps students visualize how an object moves in the 3D space, but also helps students set up correct mathematical equations for effective problem solving.

This presentation focuses on the description of an interactive set of CSA learning modules recently developed for engineering dynamics. During the past several years, the presenter has designed a set of technical problems covering eight important topics in engineering dynamics, such as kinematics of a particle and kinematics of a rigid body. A set of CSA learning modules have been developed based on these technical problems. Each module has interactive user interfaces and contains a step-by-step solution to the problems. Most important, each module allows students to change inputs to observe how outputs vary simultaneously, so students understand the effect of inputs on problem solutions. Quantitative assessments through pretests and posttests have also been conducted. The results show that these CSA learning modules improved students' problem solving in engineering dynamics.

Keywords: Computer simulation and animation (CSA), problem solving, engineering dynamics

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Debt And Suicide Story Of An Agriculturally Developed State Punjab

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ABSTRACT

After the exhaustion of green revolution technology, no new invention has been by the state to cope up with negative effects of green revolution. In addition to this, due to liberalization, there is declining institutional support to agrarian sector since 1990s lead to lower subsidies and rising costs of cultivation. Since 1990s declining agricultural growth along with high cultivation costs and stagnant minimum support have diminished farmers' incomes across India. Farmers particularly, small and marginal farmer households compelled to borrow largely from formal and informal sources due to regular losses from agriculture due to imbalance between costs and output prices. Further, due to high rates of interest from informal lenders put farmers in to debt trap. This agrarian distress leads to an alarming spate of farmers' suicides in several states of India. Agrarian suicides in an agriculturally developed and role model state of Punjab is very disturbing and needs attention. The present empirical study explores the factors behind farmers' suicides in the suicide prone districts namely, Mansa and Sangrur of Punjab. Primary data has been obtained from families in these suicide prone districts through personal interviews with the help of a well-structured questionnaire. The data collected from 300 farmer households (150 each for treatment and control group) for the year June 2013-May 2014. This paper document the socio-economic profile of farmers; studying the extent of indebtedness; pattern of capital used by farmer. Further, epirical testing (to find probability of a farmer to commit suicide) will be done employing qualitative response models such as, Linear Probability Model (LPM), Logit and Probit models.

Developing Bachelor Of Technical And Applied Studies With A Concentration In Manufacturing Science

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ABSTRACT

In Ohio, the top four industries impacting Ohio's economy are 1) agriculture; 2) manufacturing; 3) mining; and 4) service. Without continuation of agriculture and manufacturing receipts, our people and communities will be unable to afford to critical services throughout our region. Collaboration between Wright State University-Lake Campus and the State of Ohio has ensured local agricultural students will have the opportunity to increase skill sets as necessitated by regulations and agriculture innovations. Manufacturing has an equal, if not greater, need for increased manufacturing skill sets. As a regional college campus in the University System of Ohio, we are fortunate to be able to create our own Bachelor of Technical and Applied Studies (BTAS) degree which allows for a combination of core university courses and technical course work. The Lake Campus already has a BTAS degree with concentrations in Agriculture, Commerce, Food Systems Management, Multimedia Design, and Graphic Design. By adding a BTAS with a concentration in Manufacturing Science, we can make a positive difference to our second largest area of economic impact statewide ^[1-6].

PROJECT OBJECTIVES

Wright State University-Lake Campus has actively assisted local businesses since the mid 1980's and in 2007 established the SkillsTrac Advanced Manufacturing Program. This program serves three general workforce populations: 1) incumbent workers in the Maintenance Technician roles, incumbent workers looking to parlay their current job in manufacturing into a more highly skilled, highly paid position, and students who are seeking an Associates in Technical Studies with a SkillsTrac concentration. Since WSU-Lake also offers a Bachelor's Degree in Mechanical Engineering, adding a BTAS degree with a Manufacturing Science Concentration, can help solidify manufacturing stability in our area by not only providing trained engineers to research and design state of the art products, but also highly-skilled technicians who have the hands-on skills to bring conceptual projects to reality. Small, medium, and large companies will want and have need for technically-trained personnel who can work with engineers and shop floor veterans alike.

COMMUNITY PROJECT SYNOPSIS

By establishing a BTAS in Manufacturing Science, we can solve two issues. 1) Allow large companies to have trained engineers who can work with hands-on, high-skill manufacturing technicians. These specialists can illustrate to the machinist and maintenance techs proper methods and techniques while problem-solving technical issues that help eliminate costly waste and down time. This will result in greater efficiency of time, product, and resources. 2) Allow small manufacturing companies to hire very well-trained manufacturing technicians at a more affordable salary who can handle tasks typically solved in large companies by a degreed engineer.

ESSENTIAL DATA

Population, Partnerships, Demographics

- 26 regional high schools (Table 1).
- Collaborations and articulation agreements can be developed between WSU-Lake Campus and Tri-Star

Career Compact, Greenville Career Tech Center, John Jay Learning Center, Apollo Career Center, Edison State Community College, Ivy Tech Community College, and Vantage Career Center.

- Develop workforce development program to capture 18-25 year underemployed or unemployed population and those who face barriers to employment.

Table 1: High Schools Served by Lake Campus

High Schools Served by Lake Campus	
Anna High School	Memorial High School
Ansonia High School	Minster High School
Arcanum-Butler High School	New Bremen High School
Botkins Local High School	GED-Diploma Holders
Celina Senior High School	Parkway High School
Coldwater High School	Perry High School
Delphos-Jefferson Sr High School	Russia Local School
Fort Loramie High School	Saint Henry High School
Fort Recovery High School	Saint Mary's High School
Greenville Senior High School	Sidney High School
Jackson Center High School	Van Wert City High School
Marion Local High School	Versailles High School
Mccomb High School	Wapakoneta Senior High School

Statewide/Regional Manufacturing

- Ohio has 48 out of 88 counties where manufacturing accounted for at least 20% of total employment earnings (table 2).
- 26,000+ jobs directly tied to advanced manufacturing sector in our service area
- 280+ operations/companies involved in this sector (table 3).
- About 68% of these counties are located in rural or metropolitan areas.
- Reciprocity agreements are in effect in bordering Indiana counties

Table 2: Counties/Percentages of Manufacturing Earnings, Employment, & OMB Designation

County	Mfg. %age of Total Earnings	Mfg. %age of Total Employment	Metro. Micro, Rural
Ohio Counties			
Shelby	52%	34%	Micro
Auglaize	40%	25%	Micro
Van Wert	30%	21%	Micro
Mercer	29%	21%	Micro
Preble	35%	20%	Metro
Miami	31%	18%	Metro
Paulding	27%	17%	Rural
Allen	24%	13%	Metro
Darke	23%	15%	Micro
Indiana Counties			
Adams	35%	21%	Micro
Randolph	33%	21%	Rural
Jay	32%	26%	Rural

Table 3: Lake Campus Regional Manufacturing Employers

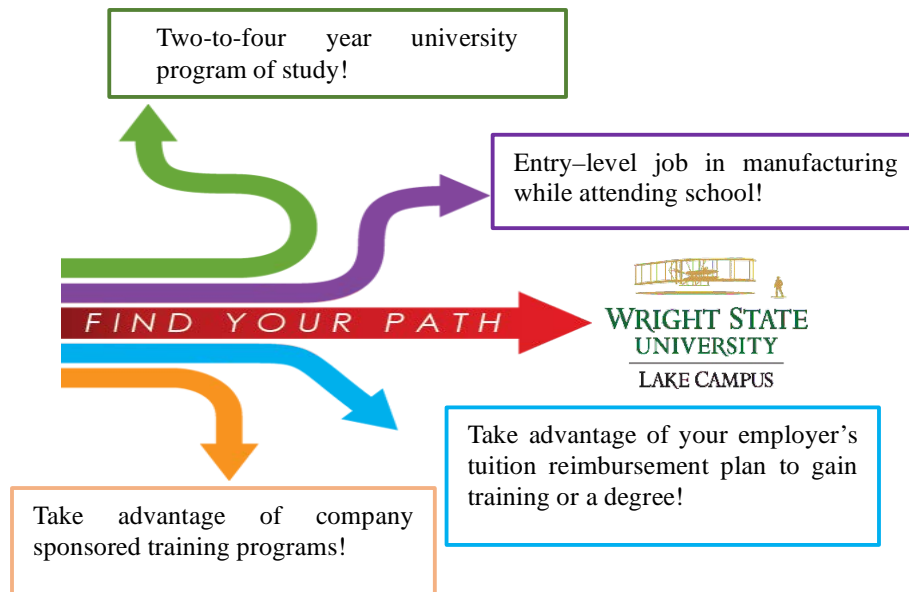
Lake Campus Regional Manufacturing Employers		
American Trim	ATI Portland	CAPT
Coldwater Machine	Continental Contitech	Cooper Farms
Crown Equipment Co.	Dannon	DRT Power Systems
Eaton Corp.	Emerson Climate Technologies	Excel Machine & Tool
Federal Mogul (Van Wert)	Fort Recovery Industries	Greenville Technologies
Honda of America	JR Manufacturing	Machine Concepts
Midmark	Midwest Poultry	Nidec Minster
Pax Machine	Parker Hannifan	Plastipak
Precision Strip	Reynolds & Reynolds	Setex
St. Marys Foundry	Wayne Trail	Whirlpool

Projected Regional Workforce Attrition Rates

Currently, high-quality, high-paid, skilled positions are going vacant every day. From a variety of company contacts—with heavily diversified product lines—we have learned many of our local companies are or will be facing a 10-20% attrition rate in skilled workers due to an aging workforce within the next 5 to 10 years. A generation ago, word of mouth was responsible to keep youth interested in manufacturing careers as well as young people witnessed the excellent livelihoods created by parents working in the manufacturing industry. Over the last few decades, this mindset has shifted considerably. Economic downturns, overseas manufacturing sourcing, and a generation of parents who thought a four-year college degree would give their child the best start for economic success, have all impacted how people look at manufacturing and manufacturing careers. Young people are often not aware of paths available to them in the manufacturing field including those requiring advanced skills commensurate with excellent pay (Figure 1). This lack of talent in the hiring pipeline needs to be addressed immediately. We learned during the last recession that the economy cannot run only on the service or knowledge sectors. Without products, no one has the financial wherewithal to buy services. We need to manufacture products required by other tier or end customers. Technology is changing so rapidly, this type of training opportunity will allow regional companies to access a pipeline of employees with the

skills and industrial know-how to increase workplace /product flexibility. This is necessary to satisfy company needs without incurring high costs from urban training centers plus travel plus lost work time to attend those centers. We will create a flexible, cohesive program that teaches the specific needs as well as teaching on the same types of equipment our local companies use.

Figure 1: Find Your Path



Skill Demands

Currently, our advisory boards (Manufacturing Center, Robotics Curriculum & Equipment) have several recurring themes that are essential and overdue. To offer education and training to the local incumbent workforce, the underemployed, those who face barriers to employment, and direct from high school graduates in these areas:

- Integration of Skills (this includes high-end automation integration as well as integration of soft skills along with technical training)
- Troubleshooting Skills & training in Processes of Troubleshooting
- Automation and Robotics
- Set up, calibrate and maintain new equipment as well as repair and re-calibrate existing equipment
- Strong communication abilities (written, verbal, presentation)
- General manufacturing skills for entry-level and high skilled personnel
- Create workforce pipelines in manufacturing
- PLC's, CNC's, code-writing, programming skills, etc.
- Technical integration of computerized languages
- Specific skills related to specific equipment or facilities as needed

Program Competition

We are the only four-year university that has the ability to offer this degree within a 50-75 mile radius. Technically-trained students will receive an officially transcribed education from an Ohio university. But there are competing training program in our region. A few manufacturers even have on-site training programs. This hasn't seemingly made a negative impact our business due to:

- Highly flexible training options with well-rounded curriculums
- Offers more in-depth, hands-on training than many on-site programs
- A wide variety of training equipment located in one area
- Our instructors are industry-trained and possess the skills required to do or to effectively teach these skills to a wide range of ages. This requires a unique skill set.

We do have limited competition from training sites such as Greenville CTC, Tri Star Career Compact, etc. These high school and/or adult instruction programs can partner with the WSU-Lake Campus Advanced Manufacturing program in order to not duplicate resources. Articulation agreements can be established to offer credit to students from those programs with additional credit hours taken at WSU-lake Campus.

Curriculum

A list of the sample curriculum similar in scope to other degree concentrations under the BTAS umbrella (Table 4).

Table 4: Sample Curriculum

<i>I. WSU Core Requirements:</i>		<i>39-41 Hours</i>
Element 1	Communication	6 Hours
Element 2	Mathematics	4 hours
Element 3	Global Traditions	6 Hours
Element 4	Arts & Humanities	3 Hours
Element 5	Social Sciences	6 Hours
Element 6	Natural Sciences	8 Hours
Additional Core Course		3-4 Hours
Additional Core Course		3-4 Hours

(Possible Degree-Compatible Choices)

ENG 1100	Year 1	ENG 2140	Year 2
EGR 1010, MTH 1260 or 1340	Year 1-2	COM 1010	Year 1-4
<i>Student's choice</i>	Year 1-4	CLS or HST	Year 1-4
<i>Student's choice</i>	Year 1-4	<i>Student's choice</i>	Year 1-4
EC2000/EC2100	Year 1-4	<i>Student's choice</i>	Year 1-4
<i>Student's choice</i>	Year 1-4	PHY 1050	Year 1-4

<i>II. Possible BTAS Degree Requirements</i>		<i>22 Hours</i>
APS 3010	Training & Presentations	3 Hours
APS 3020	Applied Business Leadership	3 Hours
MFS 1040	Engineering Design & Solid Modeling	4 Hours
MFS 2120	Statics	3 Hours
MFS 3120	Mechanics of Materials	3 Hours
MFS 4010	Mechanical Design	3 Hours
APS 4020	Project Evaluation	3 Hours

<i>III. Concentration Requirements</i>		<i>58 Hours</i>
CCS 2000	Career Pathways in Manufacturing	1 Hour
TEG 2910	Maintenance Fundamentals	3 Hours

TEG 2920	Industrial Mechanics	3 Hours
TEG 2930	Industrial Electricity	3 Hours
TEG 2940	Pneumatics & Hydraulics	3 Hours
TEG 2950	Intro to Motors & Motor Controls	3 Hours
TEG 3010	Basic Machining	3 Hours
TEG 3020	Basic Welding	3 Hours
TEG 3030	Fabrication	3 Hours
TEG 3040	Intro to CNC	3 Hours
TEG 3050	CNC Mill	3 Hours
TEG 3060	CNC Lathe	3 Hours
TEG 3070	Industrial Controls	3 Hours
TEG 3080	Industrial Panel Wiring	3 Hours
TEG 4000	Programmable Logic Controllers	3 Hours
TEG 4010	Industrial Automation	3 Hours
TEG 4020	Applied Automation	3 Hours
TEG 4030	Intro to Robotic Systems	3 Hours
TEG 4040	Advanced Robotics	3 Hours
TEG 4050	Robotic Welding	3 Hours

BTAS in Manufacturing Science***119-121 Credit Hours***

CONCLUSION

Offering the Bachelor of Technical and Applied Studies with a Concentration in Manufacturing Science at Wright State University Lake Campus will provide high-quality, reasonably-priced advanced education opportunities locally. Our region and our state will keep training dollars in the area, maintain high local employment rates, and retain manufacturing base.

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Interpreting Assessment Data

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ABSTRACT

This paper will discuss the interpretation of the assessment data from an online business simulation in assessing student learning in the MGT 482 Strategic Management Course in an Undergraduate Business Curriculum. The MGT482 Strategic Management Course is the last, capstone course in the Bachelors of Science in Management Degree at National Louis University. This course utilizes Glo-Bus, a business management simulation (www.glo-bus.com), and allows for assessment of learning outcomes. This paper will review, analyze and interpret 5 years of assessment data.

INTERPRETING ASSESSMENT DATA

Assessment

Student learning outcomes assessment developed in U.S. higher education in the mid-1980s in response to a political and cultural environment demanding accountability (Banta, 1993). This accountability requested evidence of what students were learning from educational institutions in measurable terms (Ewell, 2002). In 1988 the Department of Education mandated all accrediting bodies call for assessment of the institutions or programs they approved. Specifically, accreditation bodies requested documented demonstration of how institutions carry out assessment of student learning and how the findings would be used to improve program changes and teaching (Aje, 2012). Today, the majority of all educational institutions claim to be performing assessment intended to improve student learning (Banta, 1993).

These requirements have helped those of us involved in the education system to question the type of experience we are providing for our students. Part of this process has been an analysis of the methods we are using to assess students in our courses (Summerville, 1993). Traditionally, evaluating a student's comprehension of factual knowledge was the primary role in assessment. A more contemporary view focuses on fostering student learning as the primary role in assessment (Weber, 2012). This shift in higher education has been defined as moving from an instruction paradigm to a learning paradigm (Weber 2012). A central element in this new paradigm is learner-centered assessment. In the learning paradigm, faculty focus less on transferring factual knowledge to students and more on creating a learning environment that empowers students to construct knowledge for themselves. The learning paradigm positions the learner, rather than the instructor, at the center of their education (Weber, 2012). The business simulation assessment tool used at National Louis University is a learner centered assessment tool.

The MGT482 Strategic Management Course

The MGT 482 Strategic Management course is the capstone course to the Bachelors in Science Management (BSM) program at National Louis University. The course engages students to use all the knowledge they've accumulated in their program and apply it to the whole organization. This course explores the components of the strategic management process. Various levels of strategy-- functional, business, global, and corporate--are explored and students are encouraged to think strategically when making business decisions. The course allows students to apply analytical thinking to broad organizational issues. It guides students on how to develop a variety of organizational strategies and assists them in planning interventions affecting the entire organization. The course introduces experienced and aspiring managers to the basic principles and concepts of the strategic management function within a variety of organizational settings.

The student learning outcomes for MGT482 Strategic Management indicate students should be able to have the following abilities at the end of the course:

- Recognize the fundamental assumptions underlying strategy formulation.
- Identify the major components of an organization's mission statement, and differentiate mission statements from objectives and strategies.
- Conduct a SWOT analysis of an organization.
- Describe the different levels of strategy: functional, business, global, and corporate.
- Recognize the differences between tactical and strategic thinking.
- Choose the appropriate organizational structure to match a selected strategy.
- Design an effective set of organizational mechanisms for carrying out and controlling organizational strategy.
- Analyze the ways in which organizational politics and conflict affect strategic choices and outcomes.

The course includes a variety of assessment activities, the main tool being a business management simulation that allows for assessment of learning outcomes.

Glo-Bus is a Business Strategy Simulation game (<http://www.Glo-Bus.com>). It is a fully-automated, on-line exercise where class members are divided into teams and assigned to run a digital camera company in head-to-head competition against companies run by other class members. Company operations parallel those of actual digital camera companies. Just like Kodak, Canon, Fuji, Nikon, and other real-world camera companies, Glo-Bus companies compete in a global market arena, selling digital cameras in four geographic regions—Europe-Africa, North America, Asia-Pacific, and Latin America (www.glo-bus.com).

In Glo-Bus, class members are divided into management teams of 1 to 5 persons and assigned to run a digital camera company in head-to-head competition against companies run by other class members. Instructors can schedule 1-2 practice rounds and 4 to 10 regular or scored decision rounds in the implementation of the simulation; each decision round represents a year of company operations. When the instructor-specified deadline for a decision round arrives, the decision entries made by the companies are automatically “processed” and Glo-Bus algorithms award sales and market shares to the competing companies, region by region. How many cameras a company sells in each geographic region is totally governed by several variables. How its camera prices compare against the prices of rival brands, how its camera performance and quality compares against rival camera brands, how the length of warranties compare, how its advertising effort compares, and so on for a total of 11 competitive factors that determine camera sales. The competitiveness of each company's camera offering relative to rivals is decisive — this is what makes Glo-Bus a “competition-based” strategy simulation. Once sales and market shares are awarded, the company and industry reports are then generated and all the results made available 15-20 minutes after the decision deadline (www.glo-bus.com).

Glo-Bus Simulation 11 Competitive Factors
How each company's wholesale selling price (for both entry-level and multi-featured cameras) compares against the corresponding industry-wide average price in each geographic region.
Price/Quality ratings.
The number of special promotions each quarter.
The length of the special quarterly promotions (in weeks).
The size of the discounts off the regular wholesale price during these promotions.
Advertising expenditures.
Product selection, as measured by the number of models in each line of cameras – entry-level and multi-featured.
The numbers of retailers carrying the company's brand.
The length of the manufacturer's warranty period.
The ease with which users of a company's digital cameras can obtain responsive technical support when they encounter difficulties.
Brand reputation among buyers and retailers.

Assessment Outcomes

The simulation provides a report (the Learning Assurance Report) summarizing the business skills and decision-making capabilities of the students. The report provides evidence about the business proficiencies of the students on each of 8 measures (Leadership Skills, Collaboration & Teamwork, Financial Analysis, Financial Management, Operations Management, Human Resources, Marketing Management, and Strategic Analysis & Planning). The three measures relating to "Leadership Skills", "Collaboration & Teamwork", and "Financial Analysis" are based on each student's individual performance as viewed by their company co-managers through a peer evaluation tool and their performance on a Glo-Bus Quiz; the other 5 measures are all based on data relating to the performance of the **group** of co-managers comprising each company in the simulation.

There are 3 Learning Assurance Reports (LAR) that come out of the Glo-Bus simulation. The **Total Population LAR** shows percentile rankings for the participants versus the total population of undergraduates students worldwide who have participated in GLO-BUS within the last 12 months. The **School-Specific LAR** presents percentile rankings for the participants based only on the population of undergraduate students at your school who have participated in within the last 12 months. The **Country-Specific LAR** generates a Learning Assurance Report which shows percentile rankings for the participants versus the population of undergraduates students in a specified country who have participated in GLO-BUS within the last 12 months.

Student Outcomes

It's most beneficial for looking at Assessment Outcomes to focus on the School Specific Results because this compares my student's results with other students at National Louis University. For the School-Specific results, based upon the average score of the sample (n=213 over 6 years of data), my students performed above the 50th percentile in 7 of the 8 areas. They performed below the 50 percentile in the area of Financial Analysis (Average 49%). This might support the general tendency of students having a more difficult time with mathematical content such as Financial Analysis. Students performed the best in the area of Human Resource Management (Average 68%) which might support the tendency for students to find this content much easier to understand any apply.

Using the 75th percentile as a population average (I would categorize this as mastery of the subject matter), the NLU students in this analysis operated in the 75th percentile between 20% (Corporate Social Responsibility, n = 43) and 50% (Marketing Management, n = 108) of the time.

School-Specific Results

	LS	C&T	FA	FM
n	213	213	213	213
Average	58%	60%	49%	60%
Median	55%	57%	50%	62%
Min	2%	3%	1%	7%
Max	100%	100%	100%	98%
Std dev	27%	28%	30%	22%
Pop Average	75%	75%	75%	75%
n>=pop average	58	63	50	60
%>=pop average	31%	33%	26%	32%
	OM	HR	MM	CSR
n	213	213	213	213
Average	50%	57%	68%	50%
Median	47%	55%	75%	50%
Min	5%	1%	6%	5%
Max	100%	97%	100%	100%

Std dev	30%	25%	27%	28%
Pop Average	75%	75%	75%	75%
n>=pop average	52	64	108	43
%>=pop average	24%	30%	50%	20%

LS – Leadership Skills

C&T – Collaboration and Teamwork

FA – Financial Analysis

FM – Financial Management

OM – Operations Management

HR – Human Resources

MM – Marketing Management

CSR – Corporate Social Responsibility

School Specific Results by year

In order to get a good handle on recent assessment measures of my students, I did a comparison analysis of 2015 and 2016 data.

	2015 n=56		2016 n=71	
	Avg	75% Percentile	Avg	75% Percentile
LS	53%	27%	62%	25%
C&T	51%	25%	59%	20%
FA	44%	23%	51%	18%
FM	44%	11%	65%	20%
OM	57%	18%	37%	11%
MM	59%	36%	54%	15%
HR	71%	59%	66%	27%
CSR	58%	29%	45%	13%

The average scores of the business proficiencies went up for my students in 4 of the 8 measures from 2015 to 2016 (Leadership Skills, Collaboration & Management, Financial Analysis, & Financial Management). The average scores of the business proficiencies went down for students in 4 of the 8 measures from 2015 to 2016 (Operations Management, Marketing Management, Human Resources, and Corporate Social Responsibility).

The 75% percent (mastery) measures for the business proficiencies went down for my students in 7 of the eight measures. The four most significant were Operations Management, Marketing Management, Human Resources, and Corporate Social Responsibility. On the up side, one measure (Financial Management) showed a significant increase from 11 to 20 percent.

It would be my recommendation to the University to review these courses in the curriculum where assessment data has shown a decline (Operations Management, Marketing Management, Human Resources, and Corporate Social Responsibility). Enhancing these areas in the curriculum might bring the scores up in these areas.

Further analysis of interest would be to compare my students' scores to other students at NLU for the same years. It would be interesting to see if there are any similarities in the trends.

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The Impact Of Leadership And Followership: An Organizational Phenomena

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ABSTRACT

Although traditional research has viewed leadership and followership as separate functions, recent studies have acknowledged the importance of followership in both the effectiveness and development of leaders. Followership models have emerged suggesting that leaders cannot be effective without having experience as a follower and that leaders and followers share characteristics that when successfully used in concert, can result in the achievement of organizational goals. Several stereotypes of what it means to be a follower inhibit both the development of followers and the willingness of aspiring leaders to assume followership roles. More research on the importance of followership to the health of an organization is necessary to encourage follower development.

THE GROWING IMPORTANCE OF FOLLOWERSHIP

The synergy between leadership and active followership is increasingly recognized as a crucial relationship and an important element of organizational achievement. The prevailing notion among experts and researchers supports leadership as both desirable and necessary (Alvesson & Blom, 2015). Per Malakyan (2014), leadership “seems almost a monopolized discipline that teaches how to influence people and make the leader successful in order to reach personal and organizational goals through success, effectiveness, and productivity” (p. 6). Over time, leadership studies have been primarily focused on leaders (Hollander, 1992) and have developed predominantly from the viewpoint of the leader. Although leadership has garnered the overwhelming majority of consideration from scholars, the concept of followership is now emerging. Bjugstad et al. (2006) suggested that more focus is placed on leadership and what makes a leader successful because of the fundamental sentiment that an organization succeeds as the leader succeeds. However “it does seem ironic that the effectiveness of a leader is to a great extent dependent on the willingness and consent of followers” (Bjugstad et al., 2006, p. 305). Essentially, there are no leaders without followers, and active followership results from an acceptance of authority which gives legitimacy to the leader’s vision and direction (Hansen, 1987).

Willson (2012) defined followership as an upward influence that encompasses individuals’ behaviors and contributions that affect outcomes within a team. In concert with effective leadership, operational followership can help generate workplace environments that are favorable to high performance (Whitlock, 2013). Leaders possess a responsibility to positively affect the development of followers, thus strengthening the team. Realization of this idea is essential, and leadership needs to be considered in its context as an interpersonal phenomenon of which followership is a key element and not simply as a practice in which leaders issue directives to followers (DeRue & Ashford, 2010; Fairhurst & Uhl-Bien, 2012).

Recent research is taking the concept a step further, suggesting that great followers can even impact the development of leadership. Chaleff (2009) noted that new literature seeks methods to educate and train followers that are willing to affect change, stand firm on behalf of leaders and organizations, and create strong leaders and organizations. In the current postindustrial era, followers retain more rights, freedoms, and influence than ever, allowing followers to challenge and refuse ineffective leaders (Malakyan, 2014). The nature of the information age has increased the need for more malleable leader-follower interaction (Bjugstad et al., 2006). Thus as Van Vugt et al.

(2008) argued, “leadership cannot be studied apart from followership and an adequate account of the leadership process must consider the psychology of followers” (p. 193).

At the surface, the idea of followership is associated with a negative connotation. Bjugstad et al. (2006) acknowledged the stigma associated with the term “follower” as well as linkage to condescending characteristics such as passivity, weakness, and conformity. Although nearly 80% of people function as followers (Malakyan, 2014), there exists a tendency for individuals to avoid being categorized as such. Williams and Miller (2002) found that over one-third of more than 1,600 executives surveyed on the subject failed to acknowledge personal followership status despite holding positions with job responsibilities that were consistent with being a follower. Furthermore, “followership is rarely discussed when corporations seek to better themselves” (Bjugstad et al., 2006, p. 305), ultimately disregarding the importance of effective followership as an integral element of the leadership process as well as an essential component of organizations achieving goals.

FOLLOWERSHIP MODELS

Like leadership, followership can be categorized into several models that help to explain the complex interaction between leaders and followers. Malakyan (2014) proposed the need to include followership into the leadership discussion, suggesting that many traditional leadership theories and models either fail to incorporate the role of followers or view leadership and followership as separate social identities that function independent of one another. The variety of followership models encompass a wide range of followership principles, from how followership builds leaders to what constitutes effective leadership-followership relationships and finally how leaders may only be as effective as the level to which a leader accepts the role of follower within the context of organizational mission.

Litzinger and Schaefer (1982) posed the idea of the West Point Thesis, which stems from the notion that leaders develop only from the ranks of capable followers and only the mastery of followership adequately prepares an individual for leadership. The research alluded to a parallel theory known as dialectic of master and slave, which claims “leadership is possible not only on the condition that followership has been learned, but on the more radical condition that the leader has known subjection” (Litzinger & Schaefer, 1982, p. 78). Litzinger and Schaefer (1982) suggested that throughout history, legendary leaders such as Churchill, Bismarck, and Caesar were first distinguished as effective followers to a cause before achieving leadership status. The military serves as a primary example of how impeccable followership at lower ranks is a prerequisite for ascension to leadership positions.

While followership can breed leadership, understanding the transposable nature of leadership and followership is valuable to an organization. Malakyan (2014) suggested that although traditional views regarding leadership and followership support separate concepts, the more practical model views leadership and followership as interchangeable functions capable of being demonstrated by the same person. Kelley (1992) stated that leadership and followership “are complimentary, not competitive” (p. 40) and in fact, one individual operating in both roles simultaneously may be more effective (Chaleff, 2012). Malakyan (2014) called this theory the leader-follower trade (LFT) approach, where “leaders and followers trade their functions in order to develop their intrapersonal perspectives, foster interpersonal relationship, and maximize mutual effectiveness” (p. 11). Hollander (2009) referred to this relationship between leader and follower as the “two-way flow of influence” (p. 37), where the leader influences the follower, the follower influences the leader, and both individuals, who share leadership and followership traits, work towards effective outcomes together. The leader and the follower in this relationship empower one another, find ways to complement one another in different situations, and “embrace a vision that is always bigger and higher than the leaders’ or the followers’ abilities” (Malakyan, 2014, p. 13). The LFT can be applied to any number of leadership models and theories using a symbiosis between leader and follower that works towards personal and organizational effectiveness.

One final followership model addressed by Litzinger and Schaefer (1982) is Barnard’s (1938) Acceptance Theory of Authority, which implies that an order is given authority not by the individual that gives the order, rather an order is given authority by the individuals to whom the order is given. Given this constraint, leaders must lead in a manner that is “construed by followers to be consistent with the goals of the organization” (Litzinger & Schaefer, 1982, p. 80). In this model, leaders are essentially followers, governed by the values of the organization and determined

by followers to be trustworthy based on how well the leader performs to the same standards and values by which followers are held. Consistent with the Acceptance Theory of Authority, a leader poses a serious threat to the health of an organization when a command does not conform to organizational principles. Per Litzinger and Schaefer (1982), “mastery of followership is even more important in the leader than in the follower” (p. 80).

STEREOTYPICAL BARRIERS FOR FOLLOWERSHIP

The negative connotation associated with followership can hinder the morale and development of individuals in follower roles. Alvesson and Blom (2015) identified negative identity and reduced autonomy as obstacles connected with leadership and followership from the followers’ point of view. Regarding negative identity, because leaders are considered superior to followers (Gordon, 2011) it makes sense that followers tend to feel inferior in relation to leaders. People are reluctant to identify as followers, a characteristic Laurent (1978) discovered in middle managers who almost exclusively highlight the authority in managing employees while denying the position as a subordinate managed by a superior.

The nature of leadership lends towards reduced autonomy amongst followers. Individual discretion to perform a job is a major component of a healthy work environment for many employees. Per Foley (2010), “autonomy is the one thing that makes professional life more fulfilling” (p. 173) and traditionally, individuals on the lower end of hierarchical relationships are subject to greater constraints that diminish autonomy. Leadership is associated with counteracting free and diverse thinking (Smircich & Morgan, 1982) while followership involves accepting a leader’s desires and value systems. True leadership is not only “about helping people do things they really like to do, but also to make them do what they do not like to do, especially when these tasks are necessary for organizational performance” (Alvesson & Blom, 2015, p. 275). This friction results in inevitable reduction of autonomy for the follower, thus an individual that values autonomy may struggle in assuming a followership role.

CONCLUSION AND RECOMMENDATIONS

Although research on leadership has dominated academia for the majority of history, the concept of followership has become relevant as society has transitioned into the information age. Per Malakyan (2014), “leadership and followership as behavioral functions ought to be treated mutually and studied simultaneously” (p. 16). Leadership cannot exist without followers, and recent research indicates that followers have the ability to impact leaders and even develop leaders from within the ranks. Several models have emerged regarding the relationship between leadership and followership, each alluding to the idea that followership is an important component of effective leadership, either directly or indirectly. The challenge for the development of followership as a prerequisite for leadership comes in the stereotypes associated with being a follower. By nature, followers are designated as inferior in status and importance, which presents issues for individuals that aspire to assume leadership positions. Ultimately, research has shown that “leaders sometimes function as followers, and followers sometimes function as leaders” (Bjugstad et al., 2006, p. 315) suggesting that it is imperative to continue research into followership and continue developing the understanding of the pivotal role followers play within an organization.

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Living The Life Of Luxury: Global Millennials On The Move

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ABSTRACT

In this world of much turmoil and uncertainty, there is one undeniable fact; certain consumers around the world are craving designer and upscale luxury products. Throughout travels to many foreign countries, the primary research supported by secondary sources indicated vast groups of individuals who all share similar desires for unique specialty items. Status dictates the level of opulence displayed, as viewed through this exploratory research.

Involvements with local international cultures within the past few years has provided opportunities to exchange life lessons on a firsthand basis. Whether in China, England, France, India, Mexico, Spain, Tanzania, Tunisia, Turkey, Uganda, or United Arab Emirates; unprecedented examples of these landscapes were unveiled to share with my students. The large and growing untapped group of international consumers wanting luxury brands, appears to be a niche for prospective business investors.

The unlimited base of wealth clients around the world is younger, more educated, and more well-traveled than previous generations. Their self-awareness is higher and their need to demonstrate such through their purchases turn these millennials (born between 1981 and 1995) into walking billboard advertisements. The level of self-confidence creates a lifestyle to be envied by onlookers. Their responsive behavior to 'keep up with the Jones' triggers more impulse buys than ever before.

The 'want to be seen' and 'need it now' consumers require a high-level of personal service. From technology to lavish and unique vacation destinations, this growing affluent demographic tends to spend more and save less than their parents, giving new meaning to 'living paycheck-to-paycheck'. As these millennials need to differentiate themselves from the mainstream consumers, upscale designers offer a warm and welcoming environment to entice this audience to spend more quality time in the store. The attractive multifaceted accommodations such as cozy recliner couches, an array of beverage options, alterations and/or delivery service, and limousine transportation are a few of the incentives used to lure in new customers as well as retaining loyal consumers.

This paper will share first-hand global research as observed throughout many lands. To secure a noteworthy share of the luxury market, attractive and exclusive offerings must be evident. Blending multicultural dimensions with local and traditional aspirations, this new target audience will have much significance in the globalized market.

Unobserved Characteristics In The Doctor-Patient Relationship May Be The Key To Restoring Minority Confidence In Healthcare

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ABSTRACT

A patient's lack of adherence to prescribed regimens is a complex and common problem across most ailments and offers limited treatment benefit at a much higher cost. This is particularly the case among minority patients who do not value their doctor-patient relationship. Patient adherence is therefore directly proportionate to trust in patient-physician relationship. Trust is developed through an iterative process of interaction and experience between patient and physician (Kao, 1998). In 2014, the Veterans Choice Act mandate created a natural experiment that fragmented healthcare for eligible veterans, providing a perfect opportunity to estimate the extent to which multiple doctor-patient relationships impact patient trust among minority Choice-eligibles. Using the 2015 Lake Research Partners & Chesapeake Beach Consulting Survey, I apply the theory of social identity to help explain that increasing the number of providers will reduce patient trust and can lead to poorer health outcomes, which suggests that an unobserved feature of the relationship (e.g., veteran status and/or familiarity on the part of the provider) is a significant concern for most minority veterans.

Does High Academic Standards Enhance Undergraduate Student Performance?

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ABSTRACT

Universities are consistently under pressure to improve retention and graduation rates from state legislatures and accrediting entities. To adapt to these requirements, one method considered by university administrators is to lower academic standards. However, others within the academic community argue that increasing standards will improve these metrics. We hypothesized that students actually desire high academic rigor and will improve their performance to meet the higher level of expectations. To test this hypothesis, increased academic standards (grade of 'C' or better and a 2.50 minimum GPA for courses within the College of Agriculture) were instituted for the undergraduate wildlife program during the Fall of 2012. We evaluated undergraduate student academic performance prior to, during, and post inclusion of higher academic standards, and between a program that instituted higher standards (Wildlife Science) and one that did not (Animal Science) during the same time period. The Animal, Rangeland and Wildlife Sciences Department graduated 358 students, of which 222 and 136 were Wildlife Science and Animal Science majors, respectively. Overall, the students that graduated within the wildlife program and their respective GPA measurements increased, the number of semesters to graduate with a BS degree decreased, and the number of unsatisfactory performances in courses decreased with the addition of increased academic standards, whereas the performance of Animal Science students remained constant. We concluded that the implementation of increased academic standards improved student performance and should not be lowered to achieve greater retention and graduation rates.

Lifestyle Modification: A Strategy To Promote Mental Health Of Teachers In Dysfunctional Rural-Based Secondary Schools South Africa

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ABSTRACT

In another study, life style modification, as a mental health promotion strategy, was implemented at dysfunctional rural schools with the aim of promoting the mental health of teachers. The aim of this study was to investigate the effect of lifestyle modification as a strategy to promote mental health of teachers in dysfunctional rural-based schools. The study was qualitative in nature collecting data through face to face interviews. Purposive sampling procedure was followed to select twelve participants for interview from eight rural-based secondary schools categorised as dysfunctional. Tesch open coding method was used to analyse data. Three themes emerged namely, self-empowered, change of environment and self-care. The study concluded that life style modification has a positive effect on the holistic being of teachers in rural Secondary schools. The study recommends that investigation on the promotion of mental health of school principals in schools categorised as dysfunctional. Secondly, the impact of mental health promotion on the academic performance of teachers be investigated.

Keywords: life style, dysfunctional schools, mental health, teachers

Trade And Feminization Of Migration In Developing Countries

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ABSTRACT

This study empirically examines and compares the impacts of trade on emigration of men and women in developing countries. Countries that are relatively rich in low-skilled workers export low-skilled-intensive goods, and import high-skilled-intensive goods as in the Quasi-Heckscher-Ohlin model due to Romalis (2004). Developing countries are relatively low-skilled abundant in relation to developed countries and therefore, they export low-skilled-intensive goods and import high-skilled-intensive goods. When developing countries liberalize trade, their imports of manufactured goods will increase leading to the contraction of high-skilled-intensive industries in home countries. The reward to the skilled workers is therefore reduced, while it increases in the developed countries. Thus, skilled workers in the developing countries see a strong incentive to migrate to the developed countries with an increase in imports. There are also reasons to believe that trade affects the propensity to emigrate of men and women differently since women in developing countries face significant wage differentials in relation to their men colleagues. Such wage gaps are either absent or less in developed countries. Therefore, skilled women are more migratory than those of men are. Using a panel of 133 developing countries for the period of 1980-2010, the results show that imports affect the emigration of high-skilled workers while there appears to be no effect on low-skilled workers and that imports have a stronger impact on the emigration of skilled-women than skilled men.

Keywords: Trade, Emigration, Heckscher-Ohlin model, Skilled-Intensive Industries

Developing A Trauma-Informed Lens In The College Classroom And Empowering Students Through Building Positive Relationships

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ABSTRACT

In many social science college courses, professors cover a wide variety of topics that may act as triggers for victims of trauma. This occurs in both traditional and online courses. At the same time, we may also encounter students who suffer trauma during their college experience. The purpose of this paper is to emphasize the importance of creating a safe and empowering environment in college classrooms regardless of what subjects we teach. Safe environments and the relationships we build with our students play a vital role in student success by understanding the importance of being trauma-informed.

Awareness To Action: Using A Data Summit To Facilitate A Conversation On The Opportunity Gap

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Dr. Amy Moyer, The College of New Jersey, USA

Dr. Brenda Leake, The College of New Jersey, USA

ABSTRACT

Since Brown v Board of Education, our nation has attempted to address the racial achievement gap. Evidence suggests, a critical first step is to use predictive analytics to raise awareness and examine solutions. While some K12 schools and higher education institutions have shown some progress in addressing issues related to the disparity in academic achievement, there remains a persistent and significant gap in outcomes. Mindful of this disparity, The College of New Jersey (TCNJ) funded a proposal to develop a strategy to facilitate a community wide discussion that focused on examining the data that may explain and influence the trends in academic outcomes.

The proposal to support a TCNJ Data Summit was submitted by the Center for Excellence in Teaching and Learning (CETL) Opportunity Gap Learning Community in collaboration with the Center for Institutional Effectiveness. The Data Summit project was designed for faculty and staff who want to strengthen the capacity of the academic units in general, but specifically want to ensure academic success of the increasingly diverse TCNJ student population. The overall goal of the Data Summit was to learn how to better leverage the data currently collected and to ultimately help faculty and staff turn raw data numbers into meaningful information. The Data Summit consisted of three conceptually different, but phenomenally interactive sessions. The sessions which occurred over the course of an academic year focused on: (1) raising awareness, (2) sharing general and unit specific data bases, and (3) providing a forum to explore alternative options to current procedures. The enduring products of the Data Summit consist of: (1) an electronic simulation that uses a hypothetical data base to raise issues regarding differential treatment of students of color; and (2) a TCNJ specific data base that will be maintained by the Center for Institutional Effectiveness. The Data Summit was specifically designed to support and align with several priorities and goals of the College's Strategic Plan.

A Current Reflection On Solar Power Generation In The United States

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ABSTRACT

The popularity and importance of solar power generation in the United States (U.S.) continues to increase. This research effort will investigate the present status of solar power generation in the U.S. with respect to the current solar photovoltaic (PV) installation of several cities in the U.S. that have significant solar installations. The solar installation incentives provided by federal and state governments, including the 30 percent federal income tax credit (ITC), the Renewable Portfolio Standard (RPS), and net metering approaches will be investigated. It was determined through this research effort that certain states are leading in solar energy installations due to, among other things, better policy support.

Teaching Economics To Business Majors

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Dr. Roy Whitmore, School of Business, University of Phoenix, USA

ABSTRACT

The article postulated that most students in the business major have at best basic preparation in college algebra. Although a thorough preparation in college algebra is sufficient to learn macro and microeconomics, many of the students with business major often struggle when studying the subject because their knowledge of college algebra is often rusty, or they encounter difficulties relating mathematical properties with various topics of the subject. Some of the algebraic applications in economics are even contradictory to what they have learned in their college algebra class. Some of the basic geometric concepts are also very helpful in learning and retaining fundamental economic concepts. The author suggested that a good teaching strategy—while teaching economics to business major—is to combine all related algebraic principles in a single lecture (see Allen, 1938). The article also suggested that teachers can improve students' learning experiences while teaching macro and micro economics for business classes by reviewing these basic algebraic and geometric concepts at the beginning of the class and revisiting these as often as needed. This way, the paper brings the relevance of basic algebra and geometry that students can apply to accelerate the learning process.

Another point to note is that—very often— multiple concepts in various chapters use the same mathematical and geometric mock-ups. However, those chapters often are not in a sequential order; therefore, not discussed in a class sequentially since, often, a course and a textbook present the concepts that are usually sequential to the subject contexts and not on the relevance to their mathematical mock-ups. The linearity of the subject contents makes the subject more difficult for many students to gain full mastery of the related fundamentals. Senge (2006) claimed that this linearity in sequential chapters is due to the limitation of language. He claimed that the brain learns better in a non-linear fashion by connecting various related concepts.

This paper presented a plan for students to use the idea Senge (2006) described and gain mastery on the various topics included in macro and microeconomics classes for business schools. Students often struggle with various calculation related to many topics related to the subject. The article Proposed that hand on exercises are helpful when learning complex economic concepts that often consist of tedious calculations. It also suggested that the student could use software such as Microsoft Excel (see Conrad, 2004) to do those calculations accurately and expedite their learning process and suggests that recalling practice can improve students' memory of what they learned.

Students' mastery on the vocabularies of a subject has significant influence in alleviating the difficulties related to mastering complex concepts; the students could use Excel to organize the vocabularies for a quick review when necessary. The organized vocabulary can also help them create a mind map of various topics; this mind map can help them to see the interrelationship of various concepts and create the whole picture of the subject they are studying.

INTRODUCTION

One of the frequent complaints from many students is that when they study economics, they find certain areas of the subject difficult to comprehend because of the mathematical complexity involved. They also complain that sometimes even when they comprehend those areas, they easily forget what they have learned, and therefore, it becomes difficult for them to manage effectively the contents of the subject. Studying economics is all about studying models (Mäki, 2002). However, all models are simply an approximation of reality. Besides Economists often builds Models are hypothetical and often have very little connection with reality. For that reason, "For outsiders, such as journalists, beginning undergraduate students, and many other social scientists, it may appear as if economists are living in a dream world of their models, in an imaginary world of fiction that they themselves have designed" (Mäki, 2002, p. 10).

Even though Mäki's statement appears to be correct, one cannot count on it to help students become successful in an economics class. The students with business majors have two challenges when it comes to studying economics. The first challenge is with their understanding and relating the economic concepts to the real world application. For example, many business students wonder if a perfect competition even exists in reality—in a sense, that one can ask can a firm be really a price taker or even if an equilibrium price exists. Gasoline price, for example, even the Chevron gas stations, the prices are different at different locations in the same city. This price difference is not because of the difference in the gas quality; it is rather because the highest prices possible the station can charge and still maximize their revenues. The second challenge for them is to remember and recall the mathematical models they encounter while studying various chapters, and some of those models keep reappearing in various chapters.

The solution to the first issue is explaining to the student is that the economic theory is always true only when the underlying conditions on which the economic models are developed and are relevant to a given situation. However, the economic theories say nothing about what actual condition exists in reality (Eucken, 1951). Eucken suggests that, therefore, one must make a distinction between the truth and relevance. According to Eucken (1951), "This is essential throughout the whole study of economics, yet it is often disregarded" (p. 234).

The solution to the second issue is clustering the similar concepts and studying the application of the same mathematical models in various concepts discussed in economics. For example, while studying the demand and supply, one can study not only the quantity demanded and supplied at various prices, but also study the demand and supply for money in the money market and the demand and supply of labor in the labor market. Such a study strategy will emphasize on the mathematical models, their underlying conditions, and the application of such models in describing economic activities under different market conditions.

The focus of this article is on clustering similar concepts of economics to help students gaining mastery on various concepts of micro and macroeconomics. For the illustrative purposes, the article discussed two different clusters. First, the linear model is used in all textbooks to discuss demand and supply. The second cluster the article used is the exponential models in describing the monetary value, interest rate, and present value of money calculations. The article also proposed that the students would benefit from using Excel in doing all the numerical calculations while studying the models. This is especially important because many students spend countless hours in doing the tedious calculation by using calculators and still come up with incorrect answers for two reasons: the first is the floating-point errors of calculators, and the second reason is that multistage calculations increase the chances of data entry errors.

Linear Model

A linear model is the most frequently used a model in most economics textbooks. The model, in most cases, represents an equation of a straight line, $y = \alpha + \beta x$. One can see a wide range of application of this model in various chapters of an economics textbook. For that reason, it is important to study the model in terms of its algebraic properties. Demand and supply are the core of many economic theories. It is not just the quantity demanded and quantity supplied at a given price, it is also useful in studying labor market, money market, and expenditure models etc. In any algebra book, in the equation of a straight line, defines the variable y as the dependent variable and the variable, x , as an independent variable. In addition, in the graph of a straight line, the dependent variable represents vertical axis (also known as y -axis). Similarly, the independent variable represents the x -axis. In a price-quantity (demanded or supplied), it seems that the price, y is the independent variable since one of the factors that influence demand is the price. However, price in demand-supply model depicts the vertical axis. Perhaps this is because of the convenience of displaying both demand-supply curve on the same chart although it is possible to show the same relationships by considering the vertical axis for the dependent variable, quantity demanded.

While studying this model, the students need to clearly understand the significance of α and β ; this understanding will help them to see how the linear model is used in so many topics they will study in the course. While the student study straight line, it should be clear that α and β are the parameters of line since both of these together defines a line uniquely. That is, no two lines can have the same value for both parameters, α and β . The parameter α is the y -intercept and is responsible for the shift of the line when its value changes under given conditions but the value of β remains unchanged. One can expand the concept of intercept to understand at what prices, theoretically the quantity demanded

and quantity supplied becomes zero. One can also expend this concept to study autonomous expenditure, differentiate fixed and variable cost of production, etc. The parameter β represents the rate of change of the variable y with respect to the variable x . One can extend this concept to understand all the elasticities, marginal propensity to spend, marginal propensity to consume, marginal return, and so forth.

Figure-1 below illustrates the concept of intercept in two different topics. The first one is the demand and supply and the second one is for the linear expenditure model.

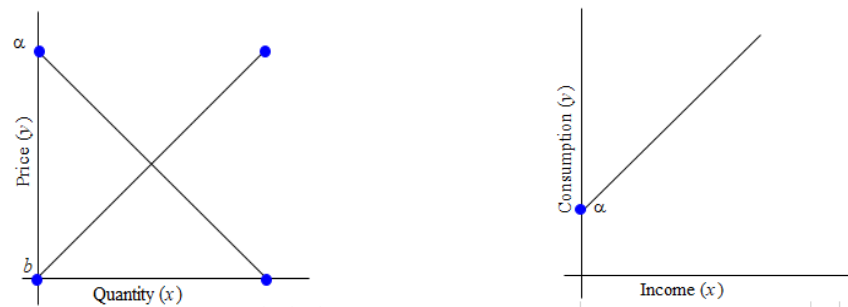


Figure 1. Demand and Supply and Linear Consumption Function

In the first figure for the demand curve intercepts the y -axis at the point α ; that is, at the price, $y = \alpha$, the quantity demanded is zero. In the same graph, for the supply line intercepts the y -axis at $y = \text{zero}$; that is, the quantity supplied is zero, when the price, $y = \text{zero}$. The second graph depicts the linear relationship between the income and expenditure. This shows that even if the income is zero, there is an expenditure; this expenditure is autonomous expenditure. What it means is that this expenditure has nothing to do with income. The autonomous expenditure is the amount the individual needs to spend for survival regardless his or her income. These are two examples; however, many other topics also use the concept of intercepts; for example, upwards and downwards shifts of demand and aggregate demand curve and associate that shift with all four determinants and their subcomponents. Those topics can be perhaps studies simultaneously; doing so will strengthen students understanding of intercepts and its application in various economic theories. One can explain shift easily by explaining the change of the intercepts under various market conditions when the slope remains unchanged. It should be noted that in a linear model, the consumption unit is not well-defined (Pryor, 1977).

Next is the concept of slope. In the linear equation, $y = \alpha + \beta x$, β represents the rate of change of the dependent variable, y , with respect to the independent variable, x . Mathematically this representation is dy/dx . However, in case of the demand curve, as the article mentioned before, the quantity demanded (x in this illustration) is the dependent variable (Chrystal & Lipsey, 1997; Oxenfeldt et al., 1963; Qambs & Snyder, 1952). Therefore, in this case, the rate of change of the quantity demanded with respect to the price change dx/dy is more relevant. However, consumers often care about the Dollar value of the price change rather the percent change. For that reason, economists consider the relative rate of change $\delta x/\delta y$, where $\delta x = dx/x$ and $\delta y = dy/y$. This is price elasticity of demand. The price is not the only factor that influences demand; the other factors are income, the price of a substitute product, the price of a complementary product, and the consumer's choice. Therefore, elasticities for each of these factors are also important to study. This leads to the need for the computation of income, cross price, and substitute product elasticities etc. The same is true for the supply side of the economy also. By studying those elasticities simultaneously, will help the students relate each elasticity with the mathematical logic, and they will be able to see that they are using a virtually same mathematical formula to calculate each of the eight elasticities. The linear equation used above not only applicable to the demand and supply of goods and services but also for the demand and supply of other areas, such as money, labor, and raw materials etc.

Next, comes the interpretation of the relative rate of changes, in particular, elasticities. Figure-1 shows that the demand curve has a negative slope and the supply curve has the positive slope; for that reason, it is better to consider the absolute value of the relative change in elasticity; in that way, one can avoid ambiguity with the interpretation since $|\delta x/\delta y|$ is always positive. One can easily show that, $0 \leq |\delta x/\delta y| \leq \infty$. When $|\delta x/\delta y| > 1$, demand or supply is called elastic, when $|\delta x/\delta y| < 1$, the demand or supply are inelastic, and when $|\delta x/\delta y| = 1$, the demand or supply are of unit

elasticity. When the demand is elastic, it is to the benefit of the producer to increase production since this expansion will increase their net gain and sell more outputs at a lower cost (Baumol, 1965). The reverse is true when the demand is inelastic (Wyand, 1937; Saint-Paul, 2000).

Elasticity simply measures the degree of response to demand or supply with the change of the variable in the denominator, which is not just the price. It could be cross price, the price of a substitute product, the price of a complementary product, or income, etc. In addition, students should know that although the demand is a function of many other variables besides price (Ulmer, 1949), the only two variables, price and quantity are used in the demand and supply models, as a matter of convenience and have created problems with reliable estimations.

As students study the relative rate of change, for them, it is easier to have the basic idea of simple rate of change, dy/dx , since the root concept of relative change is the rate of change. While studying the slope, using β for the relative change, the students need to recognize that there are three unique situations related to values of β . These are $\beta = 0$, $\beta = 1$, and $\beta = \infty$. When $\beta = 0$, the linear equation becomes, $y = \alpha$; it is a horizontal line. When $\beta = 1$, the line has 45-degree slope, and when $\beta = \infty$, the line is vertical. The same concept applies to the relative rate of change as well; for example, in case of elasticity, the concept of perfectly elastic demand and perfectly supply generated horizontal lines and perfectly inelastic demand and perfectly inelastic supply generates vertical demand and supply lines. Many sections of micro and macroeconomics use the concept of the rate of change or simply the concept of slope, β , as shown in the linear model when used as a consumption function. In this case, the dependent variable consumption, y , is the function of income, x . In addition, in the graph, the dependent variable is the y -axis and the independent variable is on the x -axis. The total consumption is the sum of the autonomous consumption, $\square\square$ and the induced consumption, βx , which is influenced by the income, x . The rate of change of consumption with respect to income is the Marginal Propensity to Consume, β . In this model, the assumption is that the income is either consumed or saved; therefore, $x = y + s$, and $dx = dy + ds$. This leads to the fact that $\beta + (1 - \beta) = 1$; as a result, $(1 - \beta)$ is the Marginal Propensity to Save. One can easily show that $dx = \beta dx + ds$; therefore, $dx/ds = 1/(1 - \beta)$, which is the multiplicative factor; that is, smaller the multiplicative factor, $1/(1 - \beta)$, better it is for the economy, since initial consumption is y , this initial consumption, eventually generates through many economic cycles the total amount of economic activities of the value $y/(1 - \beta)$. The student should note that $(1 - \beta)$ is the marginal propensity to saving. This equation suggests that more consumption is better for the economy as demand drives production.

Many topics in an economics class use the mathematical formulas for absolute change, the rate of change, relative change, and the rate of relative changes. It will be easier for the students to study these formulas and then use the theories as applications of these formulas. This is not to undermine the underlying economic theories but to help the students to bundle similar concepts together and practice those concepts in single sessions.

Areas of a Rectangle and Triangle

While studying linear models, the geometric concepts of finding the area of a rectangle or a triangle are often applied in various topics such as determining the consumer surplus, producer surplus, social surplus, impact of government-imposed price restriction; that is, the impact of price floor and price ceilings, surplus and scarcity, etc.

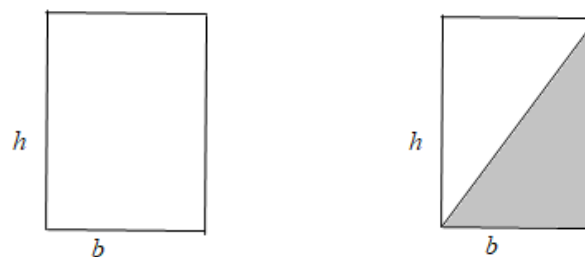


Figure 2. The areas of rectangle and triangle

The concept of the area of a rectangle and the area of a triangle is closely related. When the students understand this

relationship, there is no need for them to memorize the formulas for the area of a triangle. Figure-2 above shows the relationship. The gray area is the half of the area enclosed by the rectangle shown to its left. For that reason, while the area of a rectangle is the base times the height, bh ; the area of the triangle is $bh/2$. These simple concepts are applicable in computing all the surpluses, scarcities, and market impacts of various regulations including tariffs, transfers, and price restrictions.

Exponential Model

The second frequently used model in business economics classes is the exponential model. The general mathematical equation of this model is $y = Kx^n$. In this model, y is the dependent variable, x is the independent variable, and K and n are the parameters. When dealing with exponential functions, students usually struggle in two main areas. First, they struggle with the calculations related to floating point errors, especially when dealing with very small numbers such as the case with interest rates and the calculation involves a long period. The second struggle is the relationship of this model with logarithm. The logarithmic representation of this model is $\log_x \left(\frac{y}{K} \right) = n$.

In order to solve the first issue, the students need to know what the floating-point error is and how they can easily avoid this error by using Excel. The second issue involves expanding their understanding of the relationship between exponential and logarithmic function with a simple illustration; for example, it is easier to understand that $10^2 = 100$. The logarithmic representation of this relationship is $\log_{10}(100) = 2$. Once the students are guided to practice on conversions of exponential to logarithmic function and vice versa, they will be able to deal with this conversion as the need arise while studying the specific topics.

Almost all textbooks have a tendency to show unique formulas associated with each topic in various chapters. This often created a tremendous burden on the students in dealing with all of the related formulas in various chapters. It can be very helpful for the students that each formula has many metamorphoses, and different topic sometime uses one of those as it fits in the topic.

DISCUSSION AND CONCLUSION

This article discussed a learning strategy for the business major when studying economics. The strategy is simple; it is studying the mathematical concepts first and then associating the topics of the subject to the mathematical theories they learned. The reason why this is an efficient way of learning is that this method of studying gives learners the opportunities to discover that they can associate each mathematical formulation to many topics discussed in economics. Linear and exponential models are used examples, and it showed the importance of a clear understanding of intercept and slope can be very helpful for a learner to retain and recall many concepts of economics normally discussed in various sections of a textbook. The article also claimed that one could associate the simple concept of the area of a rectangle to multiple topics of economics.

Students often complain that they forget what they have learned even after repeated revision of the concepts. In fact, in most cases, they did not forget, they simply have difficulties in recalling what they have learned. For that reason, recall practice is necessary for addition to the practice of the application of the concepts. One of such practice is testing during the study (Cull & Zechmeister, 1994). Most homework assignments and in-class practice sessions focus on the later and totally ignore the former. The recall practice can be achieved easily by creating a list of the learning objectives in a tabular form and recalling the main concepts first, with the aid of precise notes created by each student and then without the aid of those notes. Like normal people, various students may lead different lifestyles, some may lead a very structured life needing very little demand on memory, and others may lead a highly stressful life heavily dependent on memory (Baddeley, 1999). Life of the students that is heavily dependent on memory is likely to have more issue of forgetfulness for two main reasons. First, the lack of structures in their learning styles leads them to put everything they learned in their memory and very little if any at all in scratch notes here and there. The second reason is that they hardly use memory aid; for example, reviewing students' learning objectives, organized short notes, memory recall practice to name but a few. As a result, the outcome of their hard work at school, to say the least, often produce less desirable results. Students can benefit from using some of the basic subject related vocabularies as mnemonics. For example, the term intercept and slope used in the linear model section in the article are two examples

of such vocabularies. It should be noted that it is not just the words but the meanings of those and the way those interacts with various concepts associated with student learning objectives are important as mnemonics. One more point is that student should avoid the trial and error method since it involves guesswork, and guesswork always interferes with conscious recall of the target items (McKenna & Ornstein, 2002).

There is a common belief that memory declines with age; however, memory strategy plays an important role in recalling newly gained knowledge. According to Bunnell, Baken, & Richards-Ward, "Poor performance on a memory task could result from such strategic failures, even when memory abilities are intact" (1999, p. 2). The result of this strategy failure affects young and the old to the same degree. To help students remember better, one can encourage them to relate the new topic they are learning with the preexisting knowledge they already mastered. This strategy will help improve their newly acquired information (Logie & Gilhooly, 1998). In case of the application of the linear model used in this article, if a student studies the parameters of the model, α and β , in such a way that it becomes a preexisting knowledge for him or her, consequently the economic concepts relevant to the linear model will be much easier for recall.

At the college level, education expects students to remember a vast amount of information on each subject. However, the study strategies that the students can use to remember those are not always clear. When the course material includes efficient study strategies for improving students' learning, it addressed the efficiency question related to course contents (Pyc & Rawson, 2007). For many students, a computer is the best source accessing and recalling instantaneously information they need (Lynch & Kogan, 2004). This has both positive and somewhat negative impact on students' ability to retain information in their memory. Since all information is available online, there is less incentive for many students to organize information in the form of class or study notes. They may think that they will have information available at the time of their need; however, for the proper use of the knowledge gained from studying a topic, it is essential that students assimilate the underlying concept of the topic at hand. Just by getting access to the information at the time of their need is insufficient for them to apply it in a given situation. James (1950) hypothesized that the primary and the secondary memory is responsible for the successful recall of events or facts after they have forgotten. This hypothesis postulate, one needs to prolong the original impression of the event or the fact for them to recall it in future, and just having a fleeting impression is insufficient, since it contains no guarantee for successful recollection.

DISCLAIMER

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The Evolution Of Education In The UAE: Pre-Universities Era

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ABSTRACT

Evolution

Studying the development of business schools in the UAE brings to mind the overall history of education in the region, which remarkably evolved in less than a hundred years.

Ssemi-formal education in what is now called the UAE started in 1903 with the establishment of the first semi-formal school in Abu Dhabi. The 'Bin Otiba School' was built as a self-governing charitable school, and was dedicated to serve a very limited number of students of its modest surrounding communities (Alshaheen, 1997, p. 17).

Before the semi-formal schools, the local Emirati families used to send their children to what is locally known as 'Al Mutawa.' The Mutawa is a religious teacher who has a sufficient knowledge to teach children the basics of Islamic teaching from the Quran, and the Hadith (Alqasimi, 1996, p. 16).

In 1953, the British built in Sharjah the first formal school offering a comprehensive curriculum (U.S. Federal Research Division, 1993, p. 81). Later on, the rest of the Emirati states received support to establish more formal schools.

In December, 2nd 1971, UAE was born. Five years later, in 1976, Sheikh Zayed bin Sultan Al Nahyan opened the United Arab Emirates University (UAEU).

Business School:

In fall 1977 as part of the UAE University faculty, the College of Business and Economics started to operate to meet the needs of the labor market.

Interactive Digital Media And Web-Based Technologies For Medical Teaching And Learning

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ABSTRACT

Surgical Anatomy and Neuroscience have traditionally been difficult subjects to teach and learn in medical schools. In an effort to ease the cognitive burden to the Basic Science medical students, this author has adopted technology enhanced learning since 2007 in medical schools in the Western Hemisphere. This includes interactive digital media projects and audio-visual textually-enhanced multimedia technologies, either Web-based and / or offline.

2007 through 2009 saw the implementation of a digital head-brain project, based on the Visible Human Program of US National Library of Medicine. This was followed by two interactive digital programs to understand the intricacies of the Cerebellum and Hypothalamus. This was capped by the creation of an interactive digital tool to assess the risk of developing a cardiovascular event within five years, given a set of subject parameters. This last was based on the parameters defined by the American Heart Association.

2009 to 2012 saw the development of an interactive tool to anatomically stage 26 cancers of the human body with just 4 clicks of the mouse. Concurrently, starting from 2009 till date, audio-visual textually-enhanced multimedia programs were created in 3 Web-based platforms, namely Slideshare, YouTube and MERLOT (Multimedia Educational Resource for Learning Online and Teaching). The last is a project of California State University.

The author currently has 246 uploads on Slideshare (151 videos, 53 PPTX and 42 digital documents), which have garnered 195 followers. 145 educational videos have been uploaded on YouTube, incorporated in 15 playlists. This has generated a subscriber base of 6,800 and has gathered 630,000 cumulative views. Concomitantly 227 learning materials have been authored and submitted in MERLOT, encapsulated in 6 bookmark collections. All these figures are increasing on a daily basis.

Most of these projects have also formed the basis of Flipped Classroom method of delivering learning, under the Rotation Model of Blended Learning technique.

Comparison of current Head-Brain Project with eight digital learning media from other sources confirmed the current digital media to be better than most of others, with an overall score of 5 on a 7-point scale.

Qualitative feedback from medical students and viewers worldwide has been overwhelmingly encouraging. Across the board, viewers from countries in all continents continue to be awed by the quality of the textually-enhanced videos and the digital media-based project, making it an experience worth remembering by all observers.

While students can continue to learn from the projects already created, these technology enhanced learning projects can be expanded to other fields of research and education that will benefit Health science students, Clinicians, Educators, and Researchers in Anatomy, Neuroscience, Radiology and Surgery.

Keywords: Medical education, Digital multimedia, Interactivity, Web platform

BIOGRAPHY

Dr. Sanjoy Sanyal is a Surgeon, Neuroscientist, Professor and Department Chair in All Saints University College of Medicine, St. Vincent and the Grenadines. He holds double Masters' degrees from JIPMER, India and Royal College of Surgeons, UK. He has published more than 50 papers in print and online journals. He has posted nearly 300 learning videos online, with his running commentaries. He has presented papers in more than 11 international forums. He holds a provisional patent from USPTO on a computerized program for staging 26 human cancers.

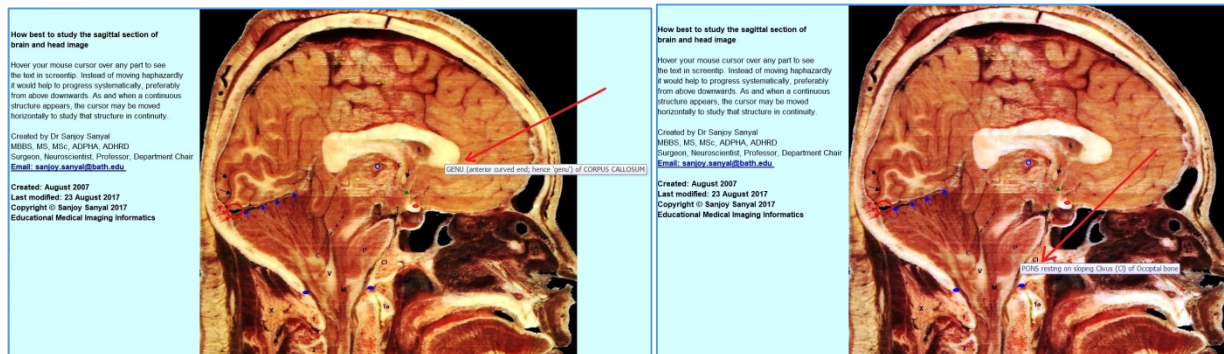
ACKNOWLEDGEMENTS

Contribution from National Library of Medicine, National Institute of Health, Bethesda, Maryland, American Heart Association and Snell's Clinical Neuroanatomy for Students is gratefully acknowledged, for making data available online for educational purposes.

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APPENDIX-1:



Figures 1 (left) and 2 (right): Sagittal Head-Brain Project, adapted from Visible Human Program of National Library of Medicine^[1]. Hovering the mouse cursor over any region of interest will show the relevant text on the cursor tip. Two such screenshots are shown.



Figures 3 (left) and 4 (right): Cerebellum Histology in 3-D graphic models. Hovering the mouse cursor over any region of interest will show the relevant text on the cursor tip. Two such screenshots are shown. Clicking on any region will take user to the description.

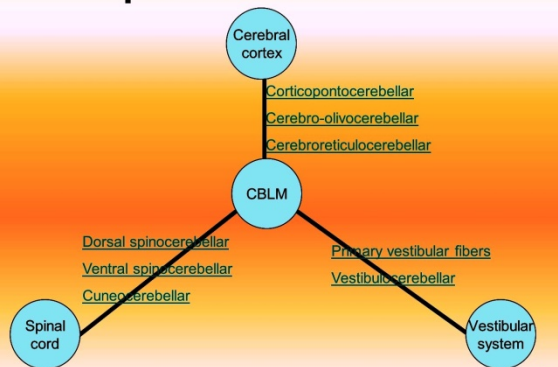
Overview of cerebellar circuits

- Inputs to cerebellum
- Intracerebellar circuits
- Outputs from cerebellum
- 9-click summary of cerebellar circuits
- Guide to abbreviations

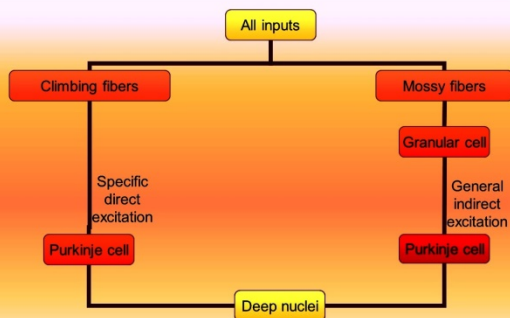
In order to make the study of cerebellum easy it has been divided into three sections, followed by a summary slide at the end. In order to make it interesting, it has been rendered as interactive as possible.

Click on any link above to go to the appropriate slide. Click on the appropriate links in individual slides (if any) to go to further slides. Click on back button at bottom right of any slide to come back to menu / sub-menu slide. The 2nd last slide summarizes the entire cerebellar circuitry in 9 clicks. Guide to abbreviations is in last slide

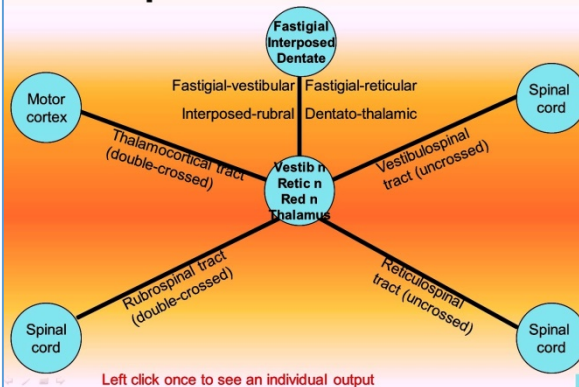
Inputs to cerebellum



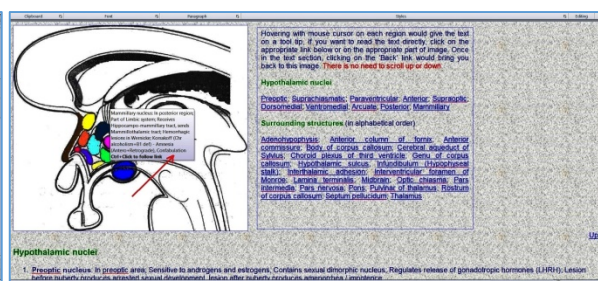
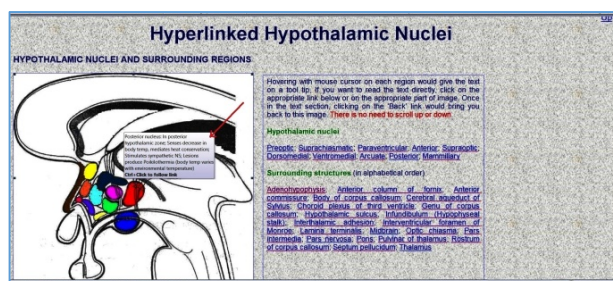
Intracerebellar circuits



Outputs from cerebellum



Figures 5 (top left), 6 (top right), 7 (bottom left) and 8 (bottom right): 4 screenshots of Interactive Cerebellum Circuits are shown here. Clicking on any link in Figure 5 will take the user to the appropriate location, shown in Figures 6, 7 and 8.



Figures 9 (left) and 10 (right): Hypothalamic Nuclei graphic models, with explanatory text. Hovering the mouse cursor over any region of interest will show the relevant text on the cursor tip. Two such screenshots are shown. Clicking on any region will take user to the description.

Click on any nucleus to see its location

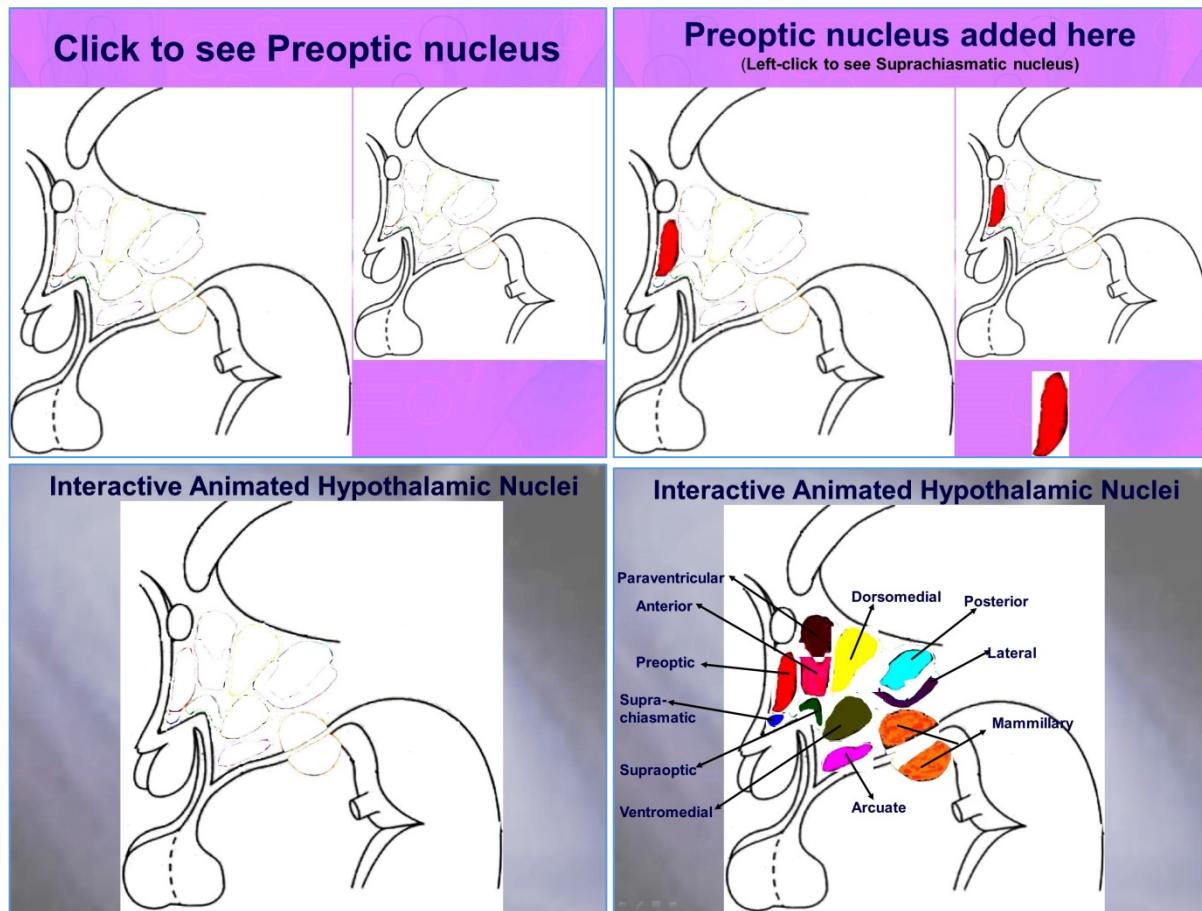
- [Preoptic nucleus](#)
- [Suprachiasmatic nucleus](#)
- [Paraventricular nucleus](#)
- [Anterior nucleus](#)
- [Supraoptic nucleus](#)
- [Dorsomedial nucleus](#)
- [Ventromedial nucleus](#)
- [Arcuate nucleus](#)
- [Posterior nucleus](#)
- [Mammillary nucleus](#)
- [All nuclei](#)

For each nucleus there are two diagrams from different sources. The gross location of nuclei and their relationships are same in both diagrams; there are minor variations in shape of some nuclei. Lateral nucleus is shown in only one diagram. There is a self-assessment quiz slide. Hovering over the question mark with cursor will give answer on the tool-tip. Clicking on it will take you to the appropriate slide. From there you can come back to the 'all-nuclei slide' or the 'quiz-slide' by clicking on the appropriate button.

Hypothalamic nuclei and surrounding structures

Hypothalamic nuclei quiz

Figures 11 (top left), 12 (top right) and 13 (bottom): 3 screenshots of Interactive Hypothalamic Nuclei are shown here. Clicking on any link in Figure 11 will take the user to one of 11 locations. One such location is shown in Figure 12. Figure 13 shows an interactive, self-assessment quiz that students can take to assess their learning. Each question mark has a cursor tip with answers. Back-buttons are also shown in the figures.



Figures 14 (top left), 15 (top right), 16 (bottom left) and 17 (bottom right): 4 more screenshots of Interactive Hypothalamic Nuclei are shown here. Clicking on the blank figures in Figures 14 or 16 will show user the location and shape Hypothalamic Nuclei sequentially, as shown in Figures 15 and 17.

Cardiovascular risk assessment tool

(Because of differing biological and physiological characteristics, this cardiovascular risk assessment is applicable only to males)

Introduction

This simple tool takes into consideration 5 of your current parameters:
age, diabetic status, smoking status, average blood pressure and total cholesterol:HDL (High Density Lipoprotein) ratio.
 In 3 mouse clicks it gives % chance of a cardiovascular event within 5 years, in terms of 'Very High', 'High', 'Moderate' or 'Mild'.

Disclaimer

This is a risk assessment, based on statistical analysis of a large population. It is not a measure of certainty nor is it a prediction. It is not meant to be a replacement for your physician's advice. For any doubts or clarifications please consult your physician. No responsibility is undertaken for any future cardiovascular event or otherwise in any individual.

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[Click here to start the risk assessment](#)

Parameters under consideration: Age, Diabetic, Smoking status

Age: The code for your age is as per the coding scheme shown below :

Age 40 to 49 years: **D**
 Age 50 to 59 years: **C**
 Age 60 to 69 years: **B**
 Age 70 years or above: **A**

Diabetic status: The code for your diabetic status is as per coding scheme shown:

Diabetic: **Y**
 Non-diabetic: **N**

Smoking status: The code for your smoking status is as per coding scheme shown:

Smoker: **S**
 Non-smoker: **T**

Thus, if you are a 70-year old male diabetic smoker, your entry code would be AYS;
 if you are a 55-year old non-diabetic non-smoker, your entry code would be CNT etc.

Click on any one of the codes below that applies to you

70 +	60 +	50 +	40 +
AYS	BYS	CYS	DYS
AYT	BYT	CYT	DYT
ANS	BNS	CNS	DNS
ANT	BNT	CNT	DNT

Hold down Ctrl button and press Page Up to go to the Introduction page

Parameters under consideration: Blood pressure, Lipid ratio

Blood pressure: In the table below, the column represents blood pressure in mm Hg:
 Choose your average blood pressure
 BP = 180 / 105 mm Hg
 BP = 160 / 95 mm Hg
 BP = 140 / 85 mm Hg
 BP = 120 / 75 mm Hg

Lipid profile: In the table below, the row represents Total Cholesterol: HDL (High Density Lipoprotein) ratio, rounded to the nearest whole number, thus:
 Cholesterol / HDL = 4
 Cholesterol / HDL = 5
 Cholesterol / HDL = 6
 Cholesterol / HDL = 7
 Cholesterol / HDL = 8

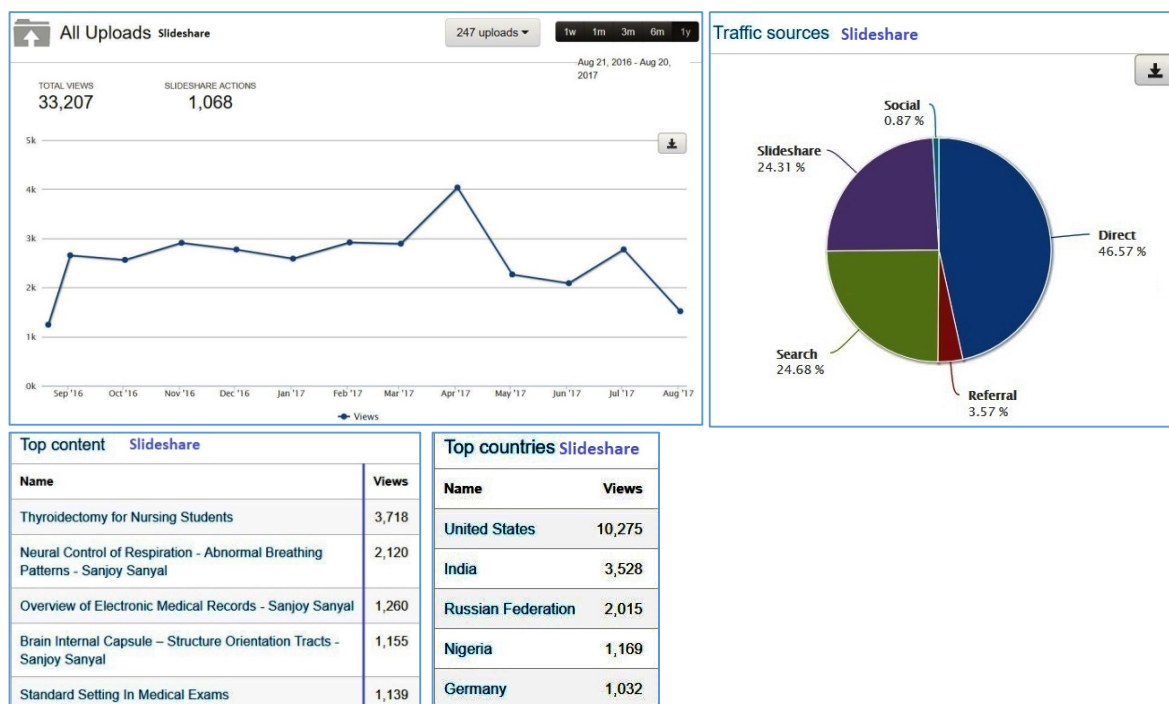
Click on the rectangle where your average BP and Cholesterol / HDL ratio values converge

Ratio	4	5	6	7	8	BP
Here	Here	Here	Here	Here	Here	180 / 105
Here	Here	Here	Here	Here	Here	160 / 95
Here	Here	Here	Here	Here	Here	140 / 85
Here	Here	Here	Here	Here	Here	120 / 75

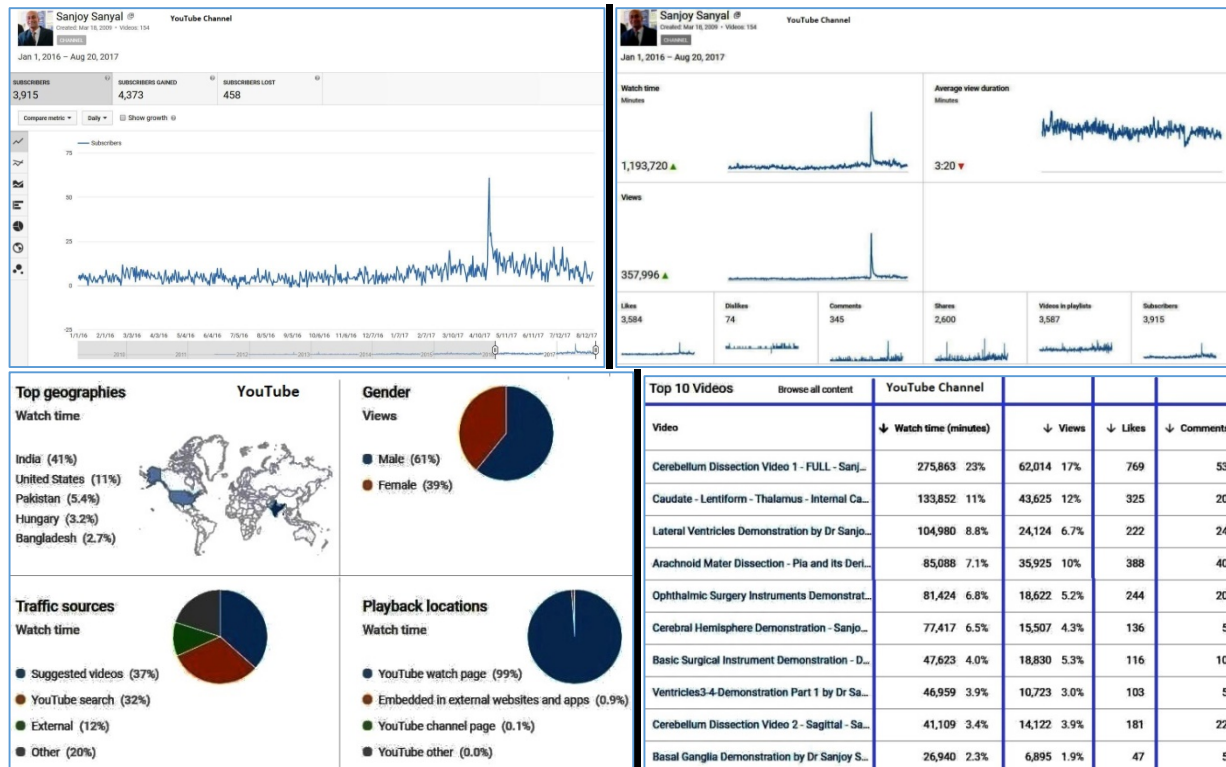
Your percent chance of a cardiovascular event in 5 years is 5 - 10% (mild)

[To see more risk assessment](#)

Figures 18 (top left), 19 (top right), 20 (bottom left) and 21 (bottom right): Screenshots of Cardiovascular Risk Assessment Tool. First click on the link '[start the risk assessment](#)' in Figure 18 will take user to next page, shown in Figure 19. Second click on the appropriate link in this page will take user to next page shown in Figure 20. Third click on the appropriate link here will take user to risk of CV event page, shown in Figure 21. Thus, with 3 clicks of mouse, one can get the calculated risk of CV event within 5 years. This project is based on the parameters defined by the American Heart Association^[2].



Figures 22 (top left), 23 (top right), 24 (bottom left) and 25 (bottom right): 4 screenshots of various stats of author's channel on Slideshare (www.slideshare.net/sanyalsanjoy8) for just last 1 year.



Figures 26 (top left), 27 (top right), 28 (bottom left) and 29 (bottom right): 4 screenshots of various stats of author's channel on YouTube (<http://www.youtube.com/user/sanyalsanjoy8>) for just last 1 year.

APPENDIX-2: Seven-parameter Comparison of Head-Brain Project with 8 Other Digital Learning Media

Serial #	Source of project	Brain view(s)	Interactivity	Labeling	Animation	Java / Other technology	Internet connectivity	Accessibility
1	Current work	Sagittal	Yes	Yes	Nil	Not needed	Not needed	Free
	Ecole Polytechnique ^[3]	All views	Nil	Nil	Yes	Required	Required	Login required
	Johannes Gutenberg ^[4]	Axial views	Nil	Yes	Nil	Not required	Required	Paid license
	NTIS ^[5]	Axial	Nil	Nil	Nil	Not required	On DVD	Paid license
	TolTech ^[6]	All view	Yes	Nil	Nil	Required	Required	Paid license
	University of Maryland ^[7]	Axial views	Yes	Nil	Nil	Sun workstation	Required	Licensed
	University of Michigan ^[8]	All views	Yes	Nil	Nil	Required	Required	Licensed
	Washington University ^[9]	All views	Yes	Nil	Yes	Required	Required	Free
8	VirtusMED ^[10]	All views	Yes	Nil	Yes	Sophisticated devices need	Required	Licensed

Table 1: This table gives a comparative analysis of the current Head-Brain project and 8 other digital learning resources on the basis of 7 parameters. Axial refers to transverse-sliced views of the brain.

The Psychological Effects Of Sexual Assault

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ABSTRACT

There are three major problems related to the overall effects of sexual assaults. They are psychological, physical and emotional. Viewing these major problems could have a young woman being raped, by a man, and the court claiming it is all her fault because she dressed provocatively. This thought process rationalizes criminal, antisocial behavior, and lays the blame of the rape on the victim (Martin, 2007). Technically, a rapist could commit a sexual assault, say the victim asked for it, and get minimum punishment, if any. The National Institute of Justice documented that 26 percent of sexual assaults, 34 percent of attempted rapes, and 36 percent of rapes were reported to authorities (Kendall, 2010). These statistics were obtained from the Bureau of Justice which also provided justifications for those low numbers. These excuses include a lack of faith in the criminal justice system, fear of being blamed for the assault, dreading retaliation from the offender, and the shame of being publicly humiliated.

Keywords: Intimate Violence, Sex Addict, Separation Anxiety Disorder, Post- Traumatic Stress Disorder (PTSD)

INTRODUCTION

The dynamics of intimate violence has to begin with stalking or similar premeditated behaviors. Sexual mally are not spontaneous; however, a murder, in self-defense, could turn out to be. The motives of hese stalkers can be broken down into four categories which are are simple obsession, love obsession, ryotomanic, and false victimization. Simple obsession stems from previous relationships where one party attempts to become reacquainted while the other party has moved on. Love obsession deals with infatuation and commonly involves a celebrity being the target. Eurotomania is an intense love for a reluctant party and its passion is the root of information collected on stalking. False victimization syndrome involves gathering attention by accusing the victim of stalking them and is patronized by female perpetrators (Meadows, 2010).

The root of stalking is attention and the forms are either obsessive or unwanted. Intimidation and harassment are often linked to this these feelings and the responses sometimes involve the law enforcement community. Simple obsession stems from former relationships and is known to be the most menacing for the victim. Anger, and jealousy, often motivate the aggressor and transforms the life of the target into a living hell. Revenge or even attempting to rekindle a past relationship are also factors this type of stalker has on the mind. The most notable example would be the infamous Orenthal James (O.J.) / Nichole Brown Simpson murder case and, as aforementioned, police investigators were called in to assess the situation. The O.J. Simpson Case involved a celebrity but it was on the opposite end of a different type of obsession (Meadows, 2010). Love obsession normally does not involve a previous relationship but does include a celebrity. Fans across the globe utilize their imaginations to place themselves with a famous person they are fantasizing about. A majority of these stalkers are suffering from some form of mental illness and celebrity worship syndrome (CWS) fits the profile. David Letterman was victimized by a woman named Margaret Mary Ray and she was caught driving his Porsche in New York. She did not have money to pay the toll and identified herself as his wife and her son as David Letterman Jr. This particular love obsession was the opposite of the simple obsession example where the man was the aggressor (Meadows, 2010).

Erotomania is a condition where typically, a woman will think that a man is in love with her. The targets are normally more mature males who have positively established themselves in our society. Positive male role models or father figures are also often beset and teachers sometimes find themselves being approached by students. False victimization syndrome is similar, because females dominate the condition but their objective is attention. Some of these ladies go

so far as to falsely accuse a man of rape which displays mental disarray as well (Meadows, 2010). Law enforcement terminology expounds rape as forcible sexual contact with a male imposing himself on a female. Women, again, are involved aggressors but in these cases as accomplices (Kendall, 2010).

Initially the stalkers show that psychologically things are unbalanced. The motives for this hate-crime is linked to four major categories. They are thrill-seeking, defensive, retaliatory, and mission (Meadows, 2010). Although there were no actual sexual assaults during simple obsession, love obsession, erotomaniac, or false victimization explanations, there are still some mind altering effects. Rohypnol is a powerful sleeping aid that is sometimes called “the date rape drug”. It is popular among the younger generation, because it is inexpensive, and a deadly weapon in the college community (Kendall, 2010). Documented commonalities show that most rapists are Caucasian males, under twenty-five years of age, and are either in school or unemployed. This information points heavily toward the higher education environment though rapes are committed by people of all races, classes, ages and cultural backgrounds (Kendall, 2010).

Marital rapes occur and are categorized as a form of spousal abuse. In this intimate partner crime, the husband powers sexual intercourse on his struggling wife. Three types of sexual assaults, within a marriage, have been identified by analysts. The first is called battering rape and adds sexual violence to pre-existing abuse. The second is non-battering rape where both parties disagree on the conditions of the act. The desire to have sex, where, or even when, are undecided but intercourse still takes place. The third is classified as obsessive and is based on the male’s sexual obsessions. They are often linked to the use of outside sources, i.e.: pornography, to become aroused. Severely abused spouses, with inadequate support systems, stand a great chance of killing their abusive husbands (Kendall, 2010).

The biggest psychological effects of marital rapes are two-fold because of the union the couple shares. If the attacker is the sole provider then the victim takes endangering themselves, and their children, into consideration. The overall well-being of the children becomes the primary concern and the mother tolerates the abuse (Kendall, 2010). The impacts of the sexual assaults may include unwanted pregnancy, lack of trust, depression, increased anxiety and PTSD (Martin, 2007). Rape Trauma Syndrome (RTS) is another condition defined and occurs immediately after the sexual assault. For an unknown, or random, attacker, RTS, could be treated aggressively as expeditiously as possible. Sleep disturbances, consistent crying, and extreme fear is both psychological, and physical, impairments that can affect victims of marital rapes. If these rapes occur continuously the healing process could be extended. A one time incident could itemize focusing on the strength of the woman and increase her strength as she survives her circumstances (Martin, 2007). Brock Turner was a 20 year-old swimmer, at Stanford University, and was sentenced to serve six months, in jail, for raping a comatose woman behind a dumpster. Once discovered he attempted to flee the scene of the crime which normally garners a two year minimum sentence. The three counts of felony sexual assault normally promote a 10 year sentence. According to an article, on Cable News Network (CNN), he was released from jail after only three months in county jail (Cevallos, 2016). The 23 year-old victim no longer wanted her body and carries her injuries internally. Psychologically this is defanging and will take a great deal of time to dissolve. This crime appeared to be one of those rare spontaneous cases but Kendall described it in detail. She documented that acquaintance rapes normally involve drugs, alcohol, and college students and those factors were present (Kendall, 2010).

It appears as though alcohol, and some thrill seeking motivation, were contributing factors to this sensitive situation (Patrick, 2006). As aforementioned, previously reviewed evidence revealed commonalities show that most rapists are Caucasian males, under twenty-five years of age, and are either in school, or unemployed. Turner fit that profile, to the maximum, and unfortunately for the victim, he was given unmerited favor in court. Turner’s father, (Dan) was quoted as saying, “His families’ life has been destroyed and his son’s 20 years of life should not be shattered for 20 minutes of action” (Cevallos, 2016). The forensic psychologist, who testified on young Turner’s behalf, should have educated his family on a condition called somnophilia. It is a paraphilic disorder where the unusual condition, of having sex with a sleeping person is gratifying (Halgin & Whitbourne, 2010). The sympathy, that the elder Turner was apparently seeking, was addressed by a pastor who mentioned this fact, “Your son is not the victim here, but a rapist, and I cannot imagine how gut-wrenching that is for you” (Cevallos, 2016). The obvious lack of compassion, for the victim, was sprinkled throughout this whole ordeal.

Paraphilia combines para, meaning faulty, and philia, which means attraction. The word somnophilia can be translated to mean a disorder where intense sexual satisfaction comes from having sex with someone who is asleep (Halgin & Whitbourne, 2010). He escaped this whole situation with less than a slap on the wrist but his victim has a potential lifetime of adversity. “She wanted to remove her body and leave it at the hospital and feels that her worth, privacy, intimacy, confidence, and voice was taken away (Cevallos, 2016). She also asked what would be the sentence for an un-athletic, underprivileged, community college, African-American or Hispanic student in this instance?

Acute stress disorder (ASD), or borderline personality disorder, have symptoms that this poor lady has already verbalized. Acute stress disorder symptoms include horror, helplessness, feeling numb or intense fear. Borderline personality disorder symptoms unstable self-image, anxiety, and emotional instability (Halgin & Whitbourne, 2010). She was raped, her assailant was caught, stood trial, and was given a light sentence. Going anywhere, that serves alcohol, would be difficult and history repeating itself is an absolute nightmare. Forgetting that whole night is in the statement, “I want to remove my body and leave it at the hospital” (Cevallos, 2016). The feeling that “that her worth, privacy, intimacy, confidence, and voice was taken away (Cevallos, 2016) covers the borderline personality disorder traits of irritability and chronic feelings of emptiness (Halgin & Whitbourne, 2010).

There were a couple of factors, studied, in relation to the role of rape myth acceptance and psychopathy in sexual assault perpetration (Mouilso, & Calhoun, 2013). There was an evaluation of 308 college men pertaining to the acceptance of rapes. Mythical acceptance was clearly associated with psychopathy, and offenders scored higher on those scales. The transferring of responsibility, to victims, was linked to first factor, which is psychopathy. This category included manipulative and callous traits, and describe the Turner males vividly. The second factor believes that rapes were trivial due to antisocial and impulsive behaviors. These disorders are believed, by these young men, to be normal and ultimately endorse aggressive behavior (Mouilso, & Calhoun, 2013).

A recent study, among college students, discovered that 25 to 60 percent of male subjects are reported to have exhibited at least one form of sexually aggressive behavior. These forms of sexual contact ranged, specifically, from unwanted kisses to vaginal penetration. Eight to 14 percent, of these young men, have openly admitted to have done acts that can be legally defined as rape (Mouilso, & Calhoun, 2013). This justification followed the individual interpretations of sexual aggression or approval of rape myths. These myths are based on potentially false claims that are based on sexual aggression perpetrated against women. This theory includes the beliefs that women lie about sexual assaults, candidly want to be raped, deserve to be raped and downplay the severity of this violent crime. This information was gathered in Georgia but appears to go well with Judge Aaron Persky’s decision in the case against Brock Turner in California. Also reported were the facts those college predators display aggressive psychopathy behaviors, a lack of empathy, impulsivity, and a strong willingness to manipulate others (Mouilso, & Calhoun, 2013).

This additional information makes it easy to locate a Rape Crisis Center for Brock Turner’s victim. The human services professionals are trained to accommodate a vast array of sexual assault victims. These advocates often predict that extensive sexual assault counseling sessions are required and that is expected. A whole host of states require 24 hour hotlines, individual and group counseling, crisis counseling, and an on- site advocate to oversee investigative interviews and medical examinations (Martin, 2007).

Axis IV Psychosocial and Environmental Problems have a great deal of categories, and factors, to contend with. Problems with the primary support group has a few categories that can determine which psychological approach to incorporate. The identifiers for these support groups have childhood, adult, and parent-child points of entry. They all weigh on the diagnosis, treatment, or end result, of a client’s disorder and must be considered. Sexual abuse of a child is examined at the parent-child juncture. Researchers have indicated that childhood sexual abuse causes individuals to overreact to almost any situation when they reach adulthood. This is largely due to hypersensitivity through the sympathetic nervous system (Halgin & Whitbourne, 2010). Earlier it was established that paraphilia combines para, meaning faulty, and philia, which means attraction. There are several attractions that are very abnormal and the statistics are equally alarming. Two-thirds of all reported sexual assault victims are with children and adolescents. Four year-olds are the most common child victims, 14-year olds are the most common adolescent victims, two-thirds of the victims are female and one-third of the offenders are related to the child. A child is a youngster under 12 years of age and adolescents are between 12 and 17. Paraphilias is an individual, over 16 years of age that has

uncontrollable sexual desires toward children. Hebephilias have the same desires toward adolescents and ephebophilias are attracted exclusively to boys (Halgin & Whitbourne, 2010).

There are also different fetishes associated with pedophilia that involve inclinations to molest children and fantasies. Predators who act on their impulses are aroused with attempting anal or vaginal intercourse, undressing the child, forcing oral sex, and touching the child's genitals. Child molesters, preference molesters, and situational molesters dig an even deeper hole in the pedophilic world. A child molester performs violent sexual acts on children. The preference molester is a narcissist that sees nothing wrong with his illness and expects society to accept his sexual preferences. The situational molester appears normal, and has traditional sexual interests, but when stressed they have uncontrollable desires to mate with babies (Halgin & Whitbourne, 2010).

A psychopathic lifestyle can be developed through the family environment and socialization experiences. Additionally, sociocultural perspectives, on antisocial personality disorder, can be developed in that very same atmosphere. Childhood victimizations are the driving forces behind that disorder but placement programs can assist preventing future problems. Boarding schools, group homes, and foster care, place a great deal of attention on alleviating the sociopathic behaviors that were developed (Halgin & Whitbourne, 2010).

The third factor bearing on the psychological effects of sexual assault addressed paranoid schizophrenia being invoked by a sexual assault from a potential step-parent. One of the key factors is to clinically assess the victim because there are four addition subtypes of schizophrenia. In addition to paranoid there are also residual, undifferentiated, catatonic and disorganized types of this illness. Anger, anxiety, delusions, and persecution are signs that this condition potentially exists (Bernstein, 2010). One of many PTSD symptoms includes acting, or feeling, if an event will reoccur. These symptoms are omnipresent, immediately after the incident, but the intensity decreases as time goes on (Foa, Chrestman, & Gildoa-Schechtman, 2009). This is a portion of the diagnostic criteria for PTSD and specifics must be observed. If the symptoms last less than three months it is acute, three or more months display a chronic condition, and six months display a delayed onset. The treatment will be allocated to conquer the situation at hand. Prolonged exposure has four phases and has fared well for our military members after leaving Afghanistan. The four phase process has a minimum of 11 sessions and a maximum of 18 (Foa, Chrestman, & Gildoa-Schechtman, 2009).

Pre-treatment preparation, psychoeducation and treatment, exposures, and relapse prevention are the phases of prolonged exposure that work the best with the maturity of the patient being taken into consideration. Another element to consider, in reference to the maturity of the victim, is poly-victimization. Poly-victimization is the term utilized to address multiple abusive incidents. Getting to the root of the assault will allow a practitioner to effectively diagnose a mental illness and implement the appropriate treatment methods. Trauma symptomatology is the study, and classification, of the indicators of the responsive mentality of an individual after a catastrophic event. In many cases victimization is reported to be more of a condition than it is an event (Finkelhor, Ormrod, & Turner, 2007).

In cases with multiple stressful events, numerous locations, and ample personnel, the ability to apply normal coping skills is hindered. The introduction of inconsistency, and distractions are constant reminders that also build a tolerance that eventually develops into these children blaming themselves for these incidents. Young minds aren't culpable enough to deal with the embarrassment of reported abuses. This is why they sometimes either remain silent or utilize the same misfortune of others as a buffer to measure their situations. Children exposed to various forms of abuse, and abusers, are more adversely affected than those suffering from one form of abuse or by one specific individual. Children abused in four different manners, within a 12 month period, are defined as poly-victims (Finkelhor, Ormrod, & Turner, 2007). There are several factors that can impact the treatment of PTSD and the nature of the event is one of them. Rape victims are more likely to develop PTSD than individuals who were physically assaulted or injured in combat (Halgin & Whitbourne, 2010).

Psychologically traumatizing activities, within the family unit, has the potential to force children into a dissociative state of mind. That condition provides them with a form of escape, from the rigors of their lives, through personal fantasies (Halgin & Whitbourne, 2010). A child originally diagnosed with PTSD will now be treated for Dissociative Post Traumatic Stress Disorder (DPTSD). Poly-victimization adds even more of a burden to that reality versus fantasy coping mechanism and Dissociative Identity Disorder (DID) is merged into the pre-existing Post-Traumatic Stress Disorder. The dissociative element alters the child's ability to develop a sense of self-worth and the

fact versus fiction contradiction wages war in the mind of a child. Hypnotherapy is the most common form of treatment, for this disorder, and, because of the diversity among people, not all results are the same (Halgin & Whitbourne, 2010).

LITERATURE REVIEW

Anxiety, depressive symptoms, and anger/aggression are the scales that mental health symptoms are measured by for children. The Trauma Symptoms Checklist for Young Children (TYSCYC) is utilized for the caregivers of respondents 2 to 9 years of age. Another checklist, the Trauma Systems Checklist (TSCC) is for respondents 10 to 17 years of age and are utilized to tie the responses to traumatic events to specific symptom domains. The older children are presented a list of how often specific events have happened to them within the past month. This particular list is compiled of feelings, behaviors, and thoughts with documented examples being mean, afraid, or weeping. The caregivers provide information collected from the younger kids with the fear of being alone, hit by adults, and sadness topping their list. Children fit into various categories, of victimization, to include, "not victimized, single victim, chronic victim, low-poly victim, or high poly victim" (Finkelhor, Ormrod, & Turner, pg.15). Single victims suffered one assault, chronic more than one, and low and high-poly victims have experienced multiple abuses (Finkelhor, Ormrod, & Turner).

Witnessing an abusive act, and being a victim of one, is far worse than experiencing one, or the other, by itself. Poly-victims merit priority attention because of their higher levels of traumatic symptomatology. The most recent findings, from Finkelhor, Ormrod, and Turner, reveals those males are more likely to be poly-victims than females. Young men reportedly experience more peer pressure assaults than females and their pride often make matters worse (Finkelhor, Ormrod, & Turner). Additionally, young men are also most likely to experience the externalized Attention Deficit Hyperactivity Disorder (ADHD). There is a small portion of the brain, called the locus coeruleus that controls attention. Once this character is adversely affected it allows attention deficit hyperactivity to evolve (Martin, 2007).

Child abuse can sometimes be an intergenerational cycle that actually happens by accident. A child that witnesses domestic violence, and then becomes physically abused, is classified as a low poly-victim. Add some derogatory comments, and demoralizing titles, and a high-poly victim is officially created. This setting involves both biological parents and sets a young person up for the ability to transfer abuse. Parents cannot effectively raise their children if a whole bunch of wrongdoing is omnipresent. An abusive home environment produces offspring that breeds unstable self-identity, difficulty attaching to others, problems with emotional regulation, impulse control problems, inability to delay gratification, displaced anger, and low frustration tolerance (Martin, 2007). This was introduced as accidentally transpiring because it began with one parent directing disheartening comments to the other and it trickling down to the kids. It began with biological parents because there is no way people who love others will mistreat them.

Rape trauma syndrome (RTS) has some side effects that follow the trauma syndrome checklist utilized for children and their caregivers. Those emotions are being evil, afraid, or even weeping. Rape trauma syndrome symptoms are sleep disturbances, consistent crying, and extreme fear (Martin, 2007). Living at home, with a victim, gives someone who is operating in a parental role somewhat of an advantage. That child becomes an easy target because of their vulnerability and innocence. Statistically these poor youngsters are being set up for failure by parents who are simply being themselves. Abused, and neglected children, have an increased likelihood of arrest, as a juvenile, by 59 percent. In adulthood that increase is 28 percent and the chances of becoming a violent criminal are increased by 30 percent (Meadows, 2010). Child sexual abuse survivors have displayed aversion to sex and depression. These post-traumatic symptoms have also supported victimization, criminal activity, and runaways. Their low self-esteem and constant betrayal promote surprising behavioral traits for these unfortunate souls. 95 percent of teenaged prostitutes were once victims of sexual abuse (Meadows, 2010). Commercial sexual exploitation of children (CSES) takes place on several levels and is a worldwide business. There are local, small regional and large national, or international components in these horrific syndicates. Ten to fifteen percent, of children living on the streets, in the United States, have been imported here for sexual purposes. India, Mexico, and Argentina are a few of those countries involved and broken promises have assured either employment or monetary rewards for parents. These young people were abused either by a parent, or caretaker, and a very high percentage of it took place while they were living at home.

Male sexual assaults are alleged to be severely underreported. Tewksbury (2007) also indicated that men suffer more physical injuries, during sexual assaults, than women. His reports also confirm that weapons are commonly involved but males normally refuse to seek medical attention. The black eyes, broken bones, and bruises are called submissive injuries and true signs that these were violent encounters (Tewksbury, 2007). For Lesbian, Gay, Bi-Sexual, and Transgender (LGBT) victims, the root of their assailants behavior is homophobia. The largest percentage of these criminals either know, or are related to, their victims. Customers, someone else, and their pimps are the top three attackers for these victims (Stotzer, 2009). This course of study gets the short end of the stick because of the stigma affiliated with being the victim of a male-on-male sexual assault (Martin, 2007).

The legal definition of a rape, in many states, doesn't even account for males being considered as victims. In 2007 these types of assaults were referred to as a fairly recent development. Up until then this form of victimization was lagging far behind those concerning women and children and even referred to as a phenomenon. Any individual who is assaulted suffers psychological and emotional distress and must make adjustments in an attempt to exist in society. Available resources, for these circumstances, are available but very difficult to pinpoint. Sexual assaults against males were visible, in prisons, but male rapes, in the community didn't really appear until the early 1980's. The way a community responds to these cases is predicated upon the perpetrator's gender and victim's sexual orientation (Tewksbury, 2007).

A significant number of men report at least one sexual assault. In Los Angeles 7.2 percent of men have confessed to being sexually assaulted, at least once, after the age of 15. A random report revealed that 3.8 percent of males admit to sexual victimization during adulthood and 61 percent were taken advantage of as a child. One survey, in particular, informed us that 6.7 percent of male members of the United States Army were victims of sexual assault. For college students one in five, and one in 11 were attacked with 8.3 percent of the undergraduates experiencing serious sexual assaults. Gay/bisexual men, who were dating, or in same sex relationships reported their unpleasant experiences at a rate between 12 and 27.6 percent. This is above a one in four percentage rate but still severely under reported (Tewksbury, 2007). The premise of these forms of assaults occur, primarily, between homosexual men with strong similarities pointing toward heterosexual date rapes. One interesting discovery is that a high percentages of these victims have been assaulted during their childhood. Studies conducted in the United Kingdom, and the United States, showed that 61 percent of the males who reported their attacks also suffered the same fate as a child. Individuals who were molested, at an early age, are more likely to seek mental health assistance than those whose first time incidents transpired during adulthood. Having their sexuality questioned, fear, and shame, are reasons why those first time victims keep silent. The potential to break what appears to be an unpleasant circle is justification for the poly-victims but they normally take their time to find help. In New York City; however, 94 percent of male sexual assault victims sought assistance within 36 hours (Tewksbury, 2007).

Victims anticipate rejection, or rumors of false claims, and often disregard the reporting process. To further support their beliefs. Many rape crisis centers are highly insensitive to a male victim's needs and refuse services all together. These reports showed that only five percent of the programs, that support male victims, have the proper treatment resources available to these men. These encounters are highly likely to be very violent and have the use of weapons at the scene. Weapons are more likely to be used by strangers and bodily injuries, other than genital, are more often reported after male on male assaults. Weapons are less likely used in correctional facility assaults whereas a community encounter increases the presence of foreign objects. One third of these individuals are restrained and common injuries include black eyes, broken bones, bruises, and abrasions on the abdomen and throat. In the aftermath colitis, ulcers, nausea, and tension headaches are post assault symptoms (Tewksbury, 2007).

Substance abuse, depression, and anxiety disorders are more likely to occur in males who were poly-victims than those who were assaulted only once. Rape trauma syndrome, outbursts of anger, and questioning their sexuality are the most common actions these targets mentally process. Being placed in a homosexual, or feminine, role left 70 percent of individuals questioning their sexual orientation and 68 percent questioning their masculinity. This is a long term condition that is suffered by both gay/bisexual, and heterosexual subjects. Additional effects, for heterosexual males, include impotence, sexual dysfunction, sexual anxieties and consensual same sex encounters (Tewksbury, 2007). In the information currently documented the question of sex is clear. There are people whose gender is in a state of nonconformity and these folks are referred to as transgender. They are destined to face high poly-victimization and it will last as long as they shall live (Stotzer, 2009).

The umbrella that falls under transgender covers various titles to include; drag queens, transsexuals, cross-dressers, and gender neutral personnel. Transgender high school students suffer physical violence and constant threats of sexual assault, physical assault, and coercive sex. They were constantly grabbed, and fondled, and two teenagers were set on fire, while on school property. As of this writing only 10 states have gender identity stipulations in their hate crime laws. One individual spoke of their neighborhood and stated that people either want to fight you or a free blow job. Sexual assaults, and rape, are the most common documented complaints from people choosing to exist under the transgender umbrella. This information comes from the Department of Public Health and the criteria is directed toward the prevention of Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS). Points of interest includes sexual behavior, anal sex, unprotected sex, and condom usage. This is vital because if the human immunodeficiency virus is left untreated it could develop into acquired immunodeficiency syndrome (Stotzer, 2009).

The most common complaint is that 50 percent of transgender personnel report unwanted sexual activity. In mid-west 66 percent of their respondents claim that they had either been the victim of, or witnessed, sexually violent acts and 23 percent have been high poly-victims. Males transitioning to females (MTF) are reported to be forced into sexual encounters at a 69 percent rate and females transitioning to males (FTM) are at 30 percent. One fifteen year old transgender male was beaten by three young men, with a belt, while his “friend” sat back and watched. It was his birthday and he believes the justification was his sexuality and gender expression. Known acquaintances are the biggest predators in this arena followed by strangers. Living a normal life, with a heightened level of harassment, has to be mentally exhausting.

RECOMMENDATIONS

The first course of action would be to evaluate the victim, physically, mentally, and emotionally, to determine, and prioritize, proper treatment procedures. Many states have legislated testing the offenders, and victims, for HIV/AIDS because the threat of exchanging these diseases increase during sexual activity (Meadows, 2010). It is important to identify these viruses because they are life threatening infections and must be approached aggressively. After a physical assessment the causes of the patient’s mental condition are taken into consideration with their emotional state being visual (Bernstein, 2010). The expressive condition, from a rape, could vary because a child abused, for the first time, would be in a state of shock as opposed to a poly-victim that can tap into inner strength with a dissociative state of mind. This is how Lashon was able to survive her encounters while participating in prostitution.

The doctors treat the viruses, and chemical imbalances, with drugs while psychologists combat the psychological damage with psychotherapy (Bernstein, 2010). These persons can be assisted as either inpatients or outpatients. Inpatients are restricted to hospitals, or institutions, if warranted. Outpatients have less severe disorder symptoms and function better in our society. Their condition allows them to receive prescription drugs, and psychotherapy, while continuing to reside within a community (Bernstein, 2010). One of the best places to assist, after the initial police, and hospital visits, would be a rape crisis center. The human services professionals there have sexual assault advocacy programs, 24 hour hotlines, and individual and group counseling available (Martin, 2007). Post-traumatic stress disorder has practically become a household term after the wars, in the Middle East, were fought. This is because it is the most common negative psychological outcome of traumatic experiences. It is now included in the Diagnostic and Statistical Manual for Medical Disorders, Fourth Edition, Text Version (DSM-IV-TR) (Foa, Chrestman, & Gildoa-Schechtman, 2009). The three categorized symptoms, of post-traumatic stress disorder, are re-experiencing, hyperarousal, and avoidance. This disorder induces momentous public health and economic consequences lasting very long periods of time. Horror, terror, and helplessness are the results of the emotions provoked through specific incidents. Cognitive-behavioral therapy (CBT) and Prolonged Exposure (PE) are forms of treatment that have been successful methods for negative experiences (Foa, Chrestman, & Gildoa-Schechtman, 2009).

The symptoms for post-traumatic stress disorder are more intense immediately after a traumatic experience. Over time the impact can decrease and effective cognitive therapy is the remedy. Prolonged exposure is a technique that encourages patients to speak about their experiences. It is a trauma focused cognitive-behavioral therapy (TF-CBT) and is utilized, extensively at Veteran’s Administration (VA) hospitals. The more victims talk about their series of events, the less painful these actions become. This neurobiological stimulation subconsciously conditions the mind to familiarize itself with what transpired and eventually allows victims to counsel others under similar circumstances.

The psychological effects of sexual assaults can interfere with an individual, and the community they reside in, for a lifetime. Proper diagnosis, treatment and recovery programs can address the emotional processing of traumatic experiences and transform a former victim into an experience therapist (Foa, Chrestman, & Gildoa-Schechtman, 2009).

CONCLUSION

The psychological effects of sexual assaults are conditions that effect individuals for a lifetime. There is no telling how a person's mind processes thought and how they will react to such horrific situations. A young man who witnesses, and is a victim of, family abuse will either follow suit or do the exact opposite in life. A woman who is sexually assaulted, at a young age, could turn to lesbianism, become a prostitute, or advocate against rapists. A man who is sexually assaulted could have a nervous breakdown, explore the option of homosexuality, or begin raping transgender people.

Lashon is 46 years old and has five children. Four of them were taken by child protective Services (CPS) and the fifth was granted custody to live with her father. She has been married four times with her second, third, and fourth husbands being within a five year period. She was raped, for years, by her aunt's husband, and told her father of these atrocities. He adopted her when she was two but did nothing to help his "daughter". She had several abortions, before she was 15, and eventually had a child by her uncle. She quickly learned to block out real life incidents during sex with her grossly overweight relative. This instinct made her a highly sought after prostitute with the ability to provide for herself. Had her father stepped in, when she was 13, Lashon may have a better understanding of what love is and could have been potentially healed of her dependency personality disorder. She constantly seeks a positive male role model as a husband but looks for love in all the wrong places. This scenario is a life situation that displays the visible effects of the lack of cognitive therapy. One of the best learning experiences is actually watching people and determining which, if any, psychological disorders are present. While tuning in to the Presidential Debates I personally feel that Donald J. Trump has narcissistic personality disorder (NPD) and Hillary R. Clinton has obsessive-compulsive personality disorder (OCPD). Proper cognitive therapy could make everyone mentioned great again.

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Policing Cyber Terrorism

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ABSTRACT

In order to police a crime there must be an act that is considered a crime and punishable under the law. There also must exist the capability to investigate for potential suspects and obtain physical or circumstantial evidence of the crime to be used in criminal proceedings. The act of gaining unauthorized access to a network system is a criminal act under federal law. Several key factors are presented during the course of this discussion and then built upon. Two methods of attack planning are presented. The attack planning cycle for traditional terrorist and then cyber terrorists planning used to penetrate a network system. Supervisory Control and Data Acquisition System (SCADA) are defined and presented as an important critical target within the nation's infrastructure. Examples of successful attacks are presented. A brief overview is used to present malicious software and the effects of its use against SCADA systems. The path for which data takes through a network is explained. The importance of the data path is vital in understanding the five methods of attribution which serve as methods of investigating cyber terrorism.

Key Words: Cyber, Terrorism, SCADA and Policing

INTRODUCTION

In order to understand the full scope of cyber terrorism, one must understand the cyber world. In an effort to narrow the scope of the discussion while at the same time illustrating what is meant by cyber terrorism, the author will provide a carefully guided examination on the issue of cyber terrorism. The author will give meaning to the terms of cyber, terrorism, and police. The reader will then be guided through a technical discussion of the cyber concepts, Supervisory Control and Data Acquisition (SCADA) Systems, and a very brief tutorial on malicious software. The path that data takes as it travels through the network will be explained followed by the concepts of attribution.

When cyber and terrorism are combined, the environment of the battle space changes. In the traditional sense, acts of terrorism or battle space are seen by, if no one else, the victims of the attack. The events that occurred on September 11th were viewed by millions around the world through the use of social media. In cyber terrorism, the battle space is in the virtual sense. Acts of hostility are unseen until the events have occurred. Even then they may not be discovered immediately. The initiating devices are also different. Explosive devices give way to computer worms and viruses that are used to penetrate their intended target in order to achieve the results of the more traditional understanding of terrorism.

BACKGROUND

Since the operation of the world runs through cyber space, consideration for target selection has no bounds for a terrorist. Therefore, the discussion should now focus on the planning phase of a terrorist's target selection. While there is no specific profile model for terrorists to select their targets, there are some commonalities (Habash, 2007).

The methodology for a terrorist attack is to achieve the best results with the least amount of risk. In general, terrorists will opt not to attack a target that has strong security measures. They will attack a target with whichever weapons are available to them for the task. The traditional method implements seven phases.

Phase one begins with a wide selection of targets. Collection of information is from a number of sources to include; sympathizers, media, news publications, and other terrorists. With the advent of the internet, terrorists who have a computer with a browser and a connection can sit in a quiet location and gather meaningful information to include blueprints and other historical information pertaining to a target. Terrorists will screen information during

this phase and determine the best target to support their cause. Key items of interest that factor into their selection are; the number of potential casualties, potential media attention, symbolic value, and relationship to critical infrastructure (Habash, 2007).

Phase two is the surveillance and intelligence collection phase. Terrorists observe the daily routine of the target. Are deliveries made? If so, what kind and by who? They also examine the security measures in place. Is there a guard force and do they frequently conduct drills? Does the guard force react quickly? Does the target utilize any technology such as cameras? Are there any inspection procedures in place for packages or vehicles? Is the target hardened with pop up vehicle barriers or any other security measures that would make penetration more difficult? In short, are there any vulnerabilities that can be exploited to make penetration into the target easier? If not, the target is bypassed and they move onto the analysis of another target. In 2004, targets under surveillance include the financial institutions of the New York Stock Exchange and the Prudential Building (Habash, 2007).

During phase three, each previously selected target undergoes further analysis. Specific questions must be answered. Does the target represent a symbolic value that will lend to the cause of the group? If so, will the attack result in wide spread media coverage? Will there be a high casualty count and will the resources that are applied to the target provide the best results? If the answers are yes, the group will proceed to the next phase of the planning cycle (Habash, 2007).

Phase four is the pre surveillance phase. In this phase, the target is exposed to more thorough intelligence gathering. All previous intelligence is reevaluated while paying closer attention to the vulnerabilities expected to be exploited. The actual plan of attack is developed in this phase to include; weapon selection, target breaching specifications, and plan of escape (Habash, 2007).

Phase five begins the refinement of the attack. Training is conducted on specific tactics, techniques, and specialized equipment. The attack is rehearsed to determine if there are any specific concerns or additional training and equipment needed to successfully complete the mission (Habash, 2007).

In phase six, final surveillance is conducted on the target. Timing of the attack and specific locations of entry are determined. The terrorists will determine if either primary or secondary diversionary measures will be used (Habash, 2007).

In the seventh and final phase, the terrorist will determine who they plan to exploit with the results of the attack. Will they have prepared statements claiming their attack? They will also conduct final planning and rehearsal of the escape plan (Habash, 2007).

LITERATURE REVIEW

Investigators should understand the five steps to a cyber-attack. Similar in nature to the traditional planning cycle of a terrorist attack, they involve a reconnaissance for information, defense penetration, setting modification, further systems infection, and paralyzing a network (Ciampa, 2009).

Reconnaissance for information, or determining vulnerabilities takes place in several forms. It can include ping sweeps, port scanning, and attempts to decipher specific passwords (Ciampa, 2009). Each will be briefly addressed.

Every machine that accesses the internet has an address. Similarly, each application has a specific port for the transmission of data. To better understand this, think of the internet as an apartment building. The internet address of the computer would be the address to the building and the port number that would correspond to the individual apartment number. A socket is the internet address of the machine combined with the port number. A socket has specific numbers. Therefore, a machine or host signed onto the Internet understands that specific data entering a specific port is from a specific known process (Dean 2010).

Network Mappers is software used to identify which systems are connected to a network. An example of a very simple network is a small business that has all of its computers or nodes linked to the business network. The ping is a packet or message that is sent out to determine which systems are attached to the network. A network administrator will use this software to identify which nodes are attached to their business network. This will identify unauthorized users as well. A terrorist can use the same software to ping a network in their target selection phase (Ciampa, 2009).

A terrorist can also use software referred to as a Port Scanner. A Port Scanner will provide three pieces of information: if the port is open, closed or blocked. If the port is open, it is receiving and transmitting data. It is also a path into the machine to exploit. If closed, the opposite is true. If blocked, the host will not respond to the ping (Ciampa, 2009).

Passwords are the weakest form of protection for a computer system. In an attempt to gain access to a system, an attacker will attempt to gain access by using common passwords that are associated with specific software. The purpose of passwords is to allow the network administrator who controls and monitors the system to gain access to the system. However, it is understood that these are very easy to remember passwords such as, "Admin001" are to be changed by the administrator once the software is installed onto the system (Ciampa, 2009). If they fail to do this, their ease of access becomes the attacker's ease of access since they are common to specific systems and universally used.

After information has been gained on the system an attack is launched into the targeted system. The purpose of the attack is to penetrate the defenses of the system. This phase evaluates the targets security measures. Penetration can be made through the use of Security Administrator Tool for analyzing Networks (SATAN). SATAN evaluates the security of the SACADA system to identify vulnerabilities without damaging the system. The design of SATAN was to help network administrators expose vulnerabilities and provide a course of action to correct them. In the hands of an attacker, they have the ability to expose a weakness for further exploitation (Ciampa, 2009).

In the Modification Phase, the attacker will create a path to reenter the system. This is completed by adjusting security settings. This adjustment is performed to permit future access by the attacker (Ciampa, 2009).

In the system infection phase, the attacker may reenter the system through the information gained from the previous phase. Once entry is regained, the system may be used as a base to initiate a second attack on different systems. The tools previously identified and explained in the paragraphs above may also be used in this phase in order to gain access to a second system (Ciampa, 2009).

In the last phase, networks and systems that have surreptitiously been entered can be maliciously damaged or paralyzed through the introduction of viruses or worms (Ciampa, 2009). In this regard the attacker may steal intellectual property, destroy the computer, and change the settings on SCADA system components such as valves and sensors to paralyze or cause catastrophic damage to a system.

Police investigators must understand the types of tools an attacker has at their disposal just like they understand the tools of a check forger are the check a pen. Consider the assassination of President Kennedy. Lee Harvey Oswald's used a Mannlicher – Carcano rifle as his tool to kill President Kennedy. Oswald had training to support his marksmanship from the United States Marine Corps (Shenon, 2013).

As seen in historical events, terrorists will use many conventional methods to attack. Explosive laden boats were used in an attempt to destroy United States Naval Ships, commercial aircraft was used to fly into skyscrapers, explosives and tactics that are the equivalent to active shooters. However, in the cyber world these weapons are much different.

Cyber-attacks are considered the greatest threat to the nation's national security. These attacks are committed using malicious software or malware. The weapons used in the cyber world include viruses and worms. Once malware enters a computer system, it seeks out its intended area of a system and performs the desired act. The results can be catastrophic to a SCADA system. A very brief explanation will be provided of viruses, worms, Trojan horses, malicious codes, and what is referred to as a blended attack.

A virus is malware that inserts into its targets files or programs. Execution of the virus is performed by the targets operating system. The virus will attach itself to the different files to include removable devices plugged into the computer through the universal serial bus (USB) ports. Other viruses attach themselves to program applications such as email once it is launched (Radack 2005).

Worms are able to self-duplicate without the assistance of the SCADA system. They can travel and infect through mass mailings. Another way is to infect the network that supports the SCADA system (Radack, 2005).

A Trojan horse is exactly like the store it represents. They appear to be harmless. Once opened, they cause a great deal of damage to a system and software (Radack, 2005).

A Mobile code is used by the attacker to penetrate the vulnerabilities of the system and expose weaknesses. A blended attack will use a combination of the above mention weapons to penetrate and expose a SCADA system (Radack, 2005). Examples will be provided to lend some credibility and evidence of the existing problem with SCADA systems.

Historical evidence is important to investigators as it provides examples to investigators with which they can build profiles of the terrorist, the act, and the methodology of the attack. Examples of this are the use of worms or a virus. Some important examples will now be provided.

In 1982, a pipeline in Siberia was infected by a Trojan horse intruder. This resulted in an explosion with the same magnitude of 3 kilotons of TNT. This was the first recorded attack on a SCADA system (Miller & Rowe, 2012).

In 1992, the Chevron plant located in Richmond, California had two satellite sites which were located in New York and San Jose, California penetrated. The attacker changed the settings on the system located in Richmond causing it to crash. The item of interest in this attack was the offices located outside the target area that were compromised. The result of the action was an unannounced release of toxins into the atmosphere with no warning to the public for a period of 10 hours (Miller & Rowe, 2012).

In 1997, an attacker penetrated a telephone company that serviced the Worcester, Massachusetts Airport. This attack resulted in the loss of all services used to operate the airport. The airport was completely paralyzed and placed the health and wellbeing of travelers and members of the immediate surrounding community in jeopardy. The denial of service attack was made by a juvenile. Denial of service attacks send countless messages to a server that controls information resulting in the network devices shutting down because it is incapable of supporting the system (Miller & Rowe, 2012).

The list of attacks grows with the 1999 Bellingham, Washington Gas Pipeline, 2000 Maroochy Water System in Queensland, Australia, 2001 California System Operator, 2003 Davis-Besse Nuclear Power Plant located in Ohio, 2003 CSX Corporation which shut down train signals, and 2007 Teham Colusa Canal Authority had unauthorized software loaded onto the SCADA system by a terminated employee (Miller & Rowe, 2012). Several more attacks have taken place since. One more interesting but deadly example is the 2010 STUXNET worm that was found in a nuclear enrichment plant in Natanz, Iran. The SCADA system was not penetrated from outside like other examples. An unidentified individual used a thumb drive and plugged it into the USB port. The worm sought out specific PLC which controlled the nuclear enrichment centrifuges. In doing so, it caused the centrifuges to speed up and slow down violently. The control room operator was not aware of the increase and decrease in speed since the information he was receiving in the booth indicated the machines were operating properly. This resulted in the damage to multiple centrifuges slowing the nuclear enrichment process for Iran (Miller & Rowe, 2012). These historical examples of attacks to SCADA systems are reason for concern. Therefore, it is the responsibility of law enforcement agencies to investigate and arrest suspects.

Consider the advantage to a terrorist who wants to inflict damage on the United States in support of their cause. All they need is a computer with a browser that has access to an Internet. As previously discussed, target planning can be performed through the use of the Internet. If terrorists know where to look, they can find tutorials on the process. Cohen (1990) published a referenced work that gave specific details on the development of malicious software. The focus of the discussion now turns to enforcement.

CONCLUSION

Policing Cyber terrorism is possible for the following reasons. The terrorist planning methodology is understood. Cyber terrorist have a specific methodology in their quest to penetrate a system. The act of penetrating a network is a criminal act and considered a violation of Federal Law. The methods to track down suspects in traditional investigations are not as successfully in cyber terrorism. However, attribution is a possible method to investigate and locate suspects of cyber terrorism. The FBI has the jurisdiction to investigate acts of cyber terrorism. They have partnerships with other federal agencies such as the NSA to obtain information on cyber terrorist. These partnerships extend down to local law enforcement. Therefore policing cyber terrorism is possible.

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R&D Spillover And Efficiency Of Cournot And Bertrand Duopolies

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ABSTRACT

Research and Development (R&D) expenditures undertaken to develop new products or reduce cost of production, play a significant role in a large number of industries in any modern economy. The U.S. Department of Commerce measures that between 1998 and 2007, business investment in R&D accounted for 4 percent of economic growth in the United States. But the benefits of R&D, in particular, cost reducing R&D are often partially non-excludable. Cost reducing R&D often generates technological spillovers that are not limited to the firm that initiates the R&D investment. Other firms, often in other industries may benefit from the technological spillover. R&D spillover thus creates a positive externality which affect the output, price and ultimately the efficiency of the firms.

Traditionally, in an oligopolistic market structure, a Bertrand price setting duopoly is more efficient than a Cournot quantity setting duopoly since the Bertrand duopoly dominates the Cournot duopoly in terms of social welfare. This result holds both for homogeneous and differentiated duopolies (Tirole (1984), Singh and Vives (1985) and Vives (1985)) Does this result hold in presence of R&D investments? Comparing Cournot and Bertrand equilibria in presence of product R&D, Chang and Ho (2014) conclude that in an asymmetric duopoly in presence of product R&D investment, Bertrand competition is still more efficient than Cournot competition.

In this paper I examine the impact of cost reducing R&D efforts in the context of differentiated Cournot (quantity setting) and Bertrand (price setting) duopolies. R&D investments create technological spillover so that firms not directly undertaking the R&D efforts do also experience marginal cost reductions. The behaviors of the firms are analyzed using a two stage game. In the first stage, firms choose their own R&D levels. In the second stage, firms in a Cournot duopoly choose the output levels while the Bertrand duopolists choose the price levels. Taking the R&D levels as given, I first determine the Nash equilibrium in the second stage. Using the second stage solution the profits of the preceding stage are expressed in terms of the R&D levels. A Nash equilibrium for the first stage is then determined. This gives rise to a subgame perfect equilibrium in the two stage game.

In this paper, I consider both non-cooperative and cooperative R&D investments. When the firms do not cooperate with each other in their R&D decisions, they determine their R&D levels in the first stage of the game independently. But since in many industrialized countries including U.S., Japan, Germany among others, public policies have been designed to improve private incentives for R&D by encouraging cooperation among different firms to undertake R&D expenditure, in this paper I also consider cooperative R&D efforts. In a cooperative game the firms do not cooperate in the second stage of the game, when they have to choose the levels of output or price but cooperate in the first stage of the game and choose the R&D levels so that their joint profit is maximized.

It is shown that in both Cournot and Bertrand duopolies with product differentiation, R&D and output levels under cooperative R&D agreements exceed those under noncooperation, while price levels under cooperative R&D fall short of those under noncooperation. For complementary and independent goods, these results are valid for any degree of R&D spillover and may hold even for sufficiently small R&D spillover with substitute goods. It has also been proved that in terms of social welfare, cooperative agreements dominate noncooperation for both Cournot and Bertrand duopolies.

The traditional result that Bertrand competition dominates Cournot competition in terms of social welfare is revisited. It is shown that when the goods are complements, for non-cooperative as well as cooperative R&D arrangements, social welfare measured by the sum total of consumer surplus and producer surplus, is larger under Bertrand duopoly than under Cournot duopoly. They are equal when the goods are independent. However the efficiency comparison between Cournot and Bertrand duopolies when the goods are substitutes does not provide unambiguous results. Due

to complexity of the expressions for output levels analytically it has not been possible to rank the respective output levels and consequently determine whether or not Bertrand duopoly dominates Cournot duopoly when the goods are substitutes. However, numerical solutions provide very useful insights. It turns out that in the case of substitute goods degree of product competition or consequently the degree of product differentiation, and the extent of R&D spillover play critical roles in welfare rankings of Cournot and Bertrand duopolies in these two stage games. If the products are close substitutes the traditional efficiency rankings may be reversed depending on the degree of R&D spillover. It is shown that under cooperative R&D agreements for high R&D spillover the level of social welfare under Cournot duopoly may dominate that under Bertrand duopoly. This result holds for non-cooperative R&D arrangements and the Cournot Duopoly is found to be more efficient than the Bertrand duopoly when the R&D spillover is sufficiently large.

Indigenous Model For Developing Local Managerial Talent In Multinational Firms: Case Of Ghanaian Mining Industry

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ABSTRACT

Despite being regarded as a key success factor in organizations, talent management and development (TMD) has been viewed from US and Western Europe perspectives. This paper therefore offers alternative conceptualization of the management and development of talent. Using the Ghanaian mining industry as a case, the paper develops an indigenous model that is contextual to the development of talent of local managers in the predominantly Western-owned industry. The authors use two sets of data – foundation pillars of TMD in industry and TMD definition produced by industry to construct the model. First, the authors develop a TMD framework by subjecting the foundation pillars to a constructive alternative analysis. Second, the results of the analysis are used to evaluate the industry definition of TMD to construct the model. It comes that the model departs from the predominantly Western version of human resource management that has characterized TMD in industry. Although developed from an indigenous perspective, the model is more likely to be efficient in developing local managers in the Western-dominated industry. From a practical viewpoint, the study provides insight into the understanding of expatriate managers to integrate locally relevant experiences, which are of meaning to trainee managers, into their development for successful outcomes. The model provides an innovative approach for the context-specific development of local managers to satisfy the mining sector's management localisation policy.

Keywords: Talent management and development, Ghanaian mining industry, Western multinational subsidiaries, local managers, indigenous talent model

Community Engagement Strategies For Online Graduate Course Development

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INTRODUCTION

The Carnegie Foundation for the Advancement of Teaching defined community engagement as “the collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity” (Driscoll, 2014). In keeping with the land grant mission of the university, instructors of an online graduate program incorporated e-Service learning into the online coursework to engage students in partnerships with the community. E-Service learning is service learning in the online environment. Service learning is the combination of community service and classroom instruction with a focus on critical reflective thinking and civic responsibility, a way to “...bridge theory and practice” (Donahue, Fenner, & Mitchell, 2015). Online course design often incorporates tools to engage learners with peers, instructors, course content, and the degree program; however, not much attention is given to engaging online learners with the community. E-Service learning is a tool that can improve online learners’ connectedness to the community.

OBJECTIVE/OVERVIEW

The objective of this presentation is to discuss how to incorporate e-Service Learning into online classrooms to increase community engagement for online learners. The presentation will begin with an overview of data from a scholarship of teaching and learning (SOTL) project showing the increase in online students’ community engagement. Next, this engaging presentation will use active participation to show how e-Service learning can be incorporated into online course design examining each of the seven elements of high-quality service-learning.

Strait and Nordyke (2015) detailed seven elements of high-quality service-learning: integrated learning, high-quality service, collaboration, student voice, civic responsibility, reflection, and evaluation. Each of these seven elements can be applied in an e-Service Learning environment. By demonstration, session attendees will understand the implementation process of active participation to incorporate a service learning component into a class structured for online learners.

SIGNIFICANCE

Service learning increases community engagement which has been shown to increase student learning outcomes (Prentice & Robinson, 2010). With online enrollments steadily increasing (Allen & Seaman, 2016) there are larger numbers of students missing out on opportunities to engage with the community. E-Service learning addresses this gap, providing students opportunities for civic engagement.

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Fear Of Missing Out: Preliminary Analysis Of Extant Measures

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ABSTRACT

Social media allows for the ubiquitous broadcast of personal information that would have previously and otherwise been privy. Individuals, particularly college students, are susceptible to feelings of fear of missing out or FOMO when viewing the social media posts of others. This “fear of missing out,” otherwise known as the increasingly prevalent acronym FOMO, can be defined as the “pervasive apprehension that others might be having rewarding experiences to which one is absent, and is characterized by the desire to stay continually connected with what others are doing” (Przybylski, Murayama & Gladwell, 2013, p. 1841). FOMO has also been characterized as an uneasy and all-consuming feeling that one is missing out (JWT Intelligence, 2012, p. 4). Though FOMO is not necessarily a concept that came about solely due to the introduction of social media sites and Internet-enabled mobile devices, it appears that constant connection has amplified this effect. The present research compares two extant measures of FOMO (Przybylski et al, 2013; Abel, Buff & Burr, 2016). These measures are also evaluated relative to social media usage habits and behaviors. Additionally, the relationships between FOMO measures and self-control are explored.

An electronic survey was distributed, yielding a sample of 201 primarily college students. Results support a medium, positive correlation ($r = 0.46$, $n = 201$, $p < 0.005$) between the two extant measures of FOMO, labeled “behavioral” FOMO (Przybylski et al, 2013) and “psychological” FOMO (Abel et al., 2016). Thus higher levels of behavioral FOMO are associated with higher levels of psychological FOMO. The correlation coefficient of 0.463 indicates a moderately strong effect size, suggesting a moderately strong, positive relationship between the two variables. The R^2 value of 0.214 indicates 21.4% shared or explained variance. Length of time spent on social media is statistically significant in relation to only psychological FOMO ($F = 3.870$, $p = 0.022$), not behavioral FOMO ($F = 0.984$, $p = 0.376$). Frequency of checking social media is statistically significant in relation to only behavioral FOMO ($F = 9.965$, $p < 0.005$), not psychological FOMO ($F = 1.143$, $p = 0.333$). Both behavioral ($r = -0.337$, $n = 200$, $p < 0.005$) and psychological ($r = -0.307$, $n = 199$, $p < 0.005$) FOMO have a moderate, inverse relationship to self-control. Thus those higher in fear of missing out demonstrate lower levels of self-control.

Differences in performance of extant FOMO measures prompted post hoc analysis, resulting in a modified FOMO measure demonstrating good psychometric properties. Specifically, exploratory factor analysis with oblimin resulted in a four factor solution explaining 77% of shared variance. Each of the four factors demonstrated good internal reliability with Chronbach’s alphas ranging from .88 to .96. The 14 item scale is detailed. Finally, implication of the results and direction for future research are discussed.

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Fear Of Missing Out: Exploring Personality Influences

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ABSTRACT

Social media has ingrained itself into the daily lives of many. As the role of social media continues to grow and change, there are behavioral and psychological implications that have resulted in a growing body of research. FOMO has been defined as the “pervasive apprehension that others might be having rewarding experiences to which one is absent, and is characterized by the desire to stay continually connected with what others are doing” (Przybylski, et al., 2013, p.1841). FOMO is characterized as an uneasy and all-consuming feeling that one is missing out (JWT Intelligence, 2012, p. 4). As the body of research in FOMO grows, continued research in the foundational influences of FOMO, including psychological underpinnings and personality influences, is necessary. The current research investigates the influence of personality characteristics/traits including self-presentation, self-monitoring, relative to fear of missing out. Theoretical models of self-monitoring and self-presentation are extended into online activity and social media consumption habits through the lens of FOMO. Of particular interest was exploring whether FOMO predicts self-presentation behavior. This will allow for exploration of various self-images manifested through presentation behavior as related to FOMO, which is new to the literature. Additional attention was focused on understanding how FOMO is related to social media posting activity (e.g., message content, social media platform(s), frequency of posting, and duration of social media usage) across a robust age distribution. As much FOMO research is based on a younger demographic, exploring FOMO across a wide age distribution is new to the literature.

An electronic survey was distributed via social media and email; of 285 responses, 249 were deemed complete and appropriate for data analysis. The survey contained items for 3 extant FOMO scales (Abel, Buff and Burr, 2016; Buff and Buff, 2017; Przybylski, Murayama, DeHaan & Gladwell, 2013), the revised Self-Monitoring Scale (Lennox and Wolfe, 1984), and a modified version of the Self-Presentation scale (Michikyan, Dennis & Subramanyam, 2015). In addition to scale questions, demographic and social media usage and preference questions were included. Reliability analysis was conducted, with all scales performing above the recommended $\alpha=.70$ (Nunnally, 1978). ANOVA was used to test the age and FOMO hypothesis that those who are older will manifest lower levels of FOMO. Significant findings are noted with each FOMO scale (Abel et al. scale, $F(6,225) = 4.535, p=.000$; Buff et. al scale, $F(6,224) = 8.799, p=.000$; Przybylski et al. scale, $F(6, 224) = 7.759, p=.000$). Regression analysis, using FOMO score calculated based on Buff et al. FOMO scale, was used to test hypotheses related to self-presentation. Results indicate that FOMO predicts self-presentation behavior across the various self-images (FOMO and False-Self, $R = .484, R^2=.234, F(1,223) = 67.73, p=.000$; FOMO and Real Self, $R = .352, R^2=.124, F(1, 221) = 31.11, p=.000$; FOMO and Exploration Self, $R=.302, R^2=.091, F(1, 219) = 21.92, p=.000$; FOMO and Compare/Impress Self, $R=.506, R^2=.256, F(1, 219)=75.04, p=.000$; FOMO and Ideal Self, $R=.324, R^2=.105, F(1, 221) = 25.873, p=.000$). Finally, to test hypotheses related to self-monitoring, K Means Cluster analysis was used to form two clusters, high self-monitors and low-self monitors. It was hypothesized that there would be a significant difference between FOMO scores for high self-monitors and FOMO scores for low self-monitors. ANOVA, using FOMO as measured by Buff et al. scale and self-monitor cluster, was used to test the hypothesis. Results were not significant ($F(1, 227) = 1.913, p=.168$). Post hoc analysis was conducted (Abel et al. FOMO, $F(1, 227) = 6.694, p=.01$; Przybylski et al. FOMO $F(1, 227) = .063, p=.802$). As Abel et al. FOMO scale was initially designed with extant scales for inadequacy, irritability, anxiety and self-esteem, it is plausible that it is better equipped to capture the underlying relationship between FOMO and self-monitoring. Practical implications and directions for future research are presented.

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The College Degree Pipeline: Using Data To Enhance Decision Making

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ABSTRACT

The California State University launched “Graduation Initiative 2025” with a clear objective to increase graduation rates for 475,000 students across 23 campuses. The goal is to meet the workforce demands in the state of California adding more than 100,000 baccalaureate prepared citizens over the next 10 years.

Pressures to increase graduation rates by federal and state decision makers have required academic leaders to pay close attention to graduation rates and prioritize efforts to decrease time to degree. CSU has an overall 4 year graduation rate goal of 57% by 2025 while the current rate is 19%. The goal is slightly above the public 4 year graduation rate of 45%. Reducing time to degree requires a cross-divisional commitment to identify data needed, know what questions to ask, and where the students are in the degree process.

The degree completion progress starts with College Readiness then moves to Enrollment, Persistence, Progress, Degree Completion and Post-College Outcomes. This presentation focuses on questions to ask during each of these stages with the goal for all students the opportunity for a timely graduation.

Professional Development For K-12 Educators On Ecological And Experiential Curriculum

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ABSTRACT

Natural history and wildlife are often topics put aside by teachers in the classroom due to the lack of time, resources, and priority preparation for state testing. Nor do many teachers have the background to integrate wildlife into their classroom. To fulfill this need, teachers (n=28) and environmental educators (n=21) were invited to participate in a professional development (PD) workshop on the kit-based Wild Bird Conservation Curriculum to gather the background and information they needed in order to conduct the curriculum in their classrooms or with their school groups. The five hands-on lesson plans, aligned with Texas state standards (TEKS), included techniques, research, and citizen science in the field of bird ecology and conservation. Teachers who participated in the workshop completed a questionnaire, pre- and post-program survey, and workshop evaluation related to their education, experience, teaching methods, workshop thoughts, and knowledge of birds. We hypothesized the workshop would improve teacher affinity and appreciation towards wildlife, knowledge of birds, and awareness of citizen science. Of the 28 teacher participants, 17 were unaware of citizen science prior to the workshop. Following the workshop, teachers continued to have a high affinity and appreciation towards wildlife and remained neutral in their attitudes towards their knowledge of birds; however, they would still like to include wildlife and citizen science into their curriculum. This professional development opportunity provided local educators with additional tools to incorporate experiential activities into their instruction, allowed them to expand their knowledge in bird ecology, and promoted potential student-teacher-scientist partnerships (STSP).

Using Metacognitive Strategies To Facilitate Composition Development In Elementary Writers

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ABSTRACT

In tracing the theoretical foundation of student writing development, it is evident that some writers have utilized the metacognitive strategies of planning, organizing, self-reflection, monitoring their own work, and directing their own learning. Unfortunately, too many American students continue to struggle, showing little evidence of metacognitive ability. Teachers are perplexed by the how to explicitly teach metacognitive strategies? This question led to an ongoing project in two elementary schools.

In working in the elementary schools during the past year, our purpose was two-fold. One related to the students, the other, the teachers. The students writing was qualitatively better. However, feedback from teachers indicated they were hesitant to go beyond what was demonstrated in the classroom. Our plan is to continue the project with the project with teachers, and look at what they already do and how it might be used or modified to include metacognitive action.

Student's Perceptions Of The Teacher Motivational Strategies Of Native Korean Speakers And Native English Speakers

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ABSTRACT

English Language Teaching (ELT) is an important part of Korean students' education from middle school to university. Students usually start learning English in middle school and it remains a required course until the first year of university. These courses are taught by two distinct types of teachers: Native English speakers and Native Korean Speakers. Although both groups often share similar educational goals and often teach within the same setting, very little interaction takes place between the two groups. Motivation is one of the most important and complex issues in ELT and the aim of this study was to see how students perceived the motivational strategies of each group, with the hopes that both groups can learn from each other. The focal point of this research was a survey focusing on the motivational strategies identified by Dornyei. The survey was an adaptation of Dornyei's survey, and focused on how the students perceived the teacher's strategies, rather than on how the teachers assessed their own strategies. The survey was given to two groups: a group of undergraduate students, and a group of graduate students, but this paper will focus solely on the results of the undergraduate students. The survey showed some clear differences between their perceptions. The surveys were also followed up by interviews that produced qualitative data. The surveys and interviews showed that Native English teachers provided intrinsic motivation through various tasks and by creating a positive classroom environment. Native Korean speakers excelled in creating extrinsic motivation, by providing realistic goals and by stressing the importance of English in the working world.

Keywords: ELT, South Korea, motivation, EFL, motivational strategies, Dornyei

INTRODUCTION

Learning a foreign language is inherently complex and because of this, it is not surprising that motivating students has been identified as being one of the most difficult aspects of teaching ELT; outranking even the selection of teaching methodology, subject matter proficiency, and textbook and curriculum guide usage (Veenman, 1984). Motivation is both a complex and a dynamic issue that is often discussed by many teachers. Lourdes Ortega observed, "Motivation is usually understood to refer to the desire to initiate L2 learning and the effort employed to sustain it, (Ortega 168)." Teachers often employ many strategies to motivate their students and to try to maintain their motivation, but it always remains an issue. A lack of motivation is often a recurrent problem in EFL classrooms (Dornyei & Kubanyiova, 2014). This paper seeks to examine how Korean university students perceive their teacher's motivational strategies and later apply it to improving motivational strategies within the Korean university context.

ELT is a big industry in South Korea and a big part of most required curriculums. While most ELT experiences come from ethnically Korean teachers for whom English is a second language, a considerable number of native English speakers from the United States, Canada, Australia, and the United Kingdom also teach ELT at all levels. These native English speakers not only come from a variety of countries, but are also from various races and ethnic groups, including Koreans for whom English is considered their first language. The distinction between these two groups is not a racial distinction, but rather one of language. These two groups: Native Korean speaking English teachers (hereafter referred to as NKS teachers) and Native English speaking English teachers (hereafter referred to as NES teachers) have often had very limited interactions with one another despite sharing common goals and common environments. The limited interactions often prevents the sharing of techniques and information and is often reported to create very different learning environments.

The anecdotal comments of students served as the impetus of this study. The comments lead to two main research questions that will be examined in this paper:

1. How do the motivational strategies of NKS and NES teachers differ?
2. How do students feel about the differences between these motivational strategies?

The first question was examined in a survey and the second question was addressed in interviews with students. This paper represents the initial findings of one of two researchers, who examined how the undergraduate students responded to the survey and follow-up questions. The larger study consisted of giving the surveys and interviews to two groups: a group of undergraduate students, and a group of graduate students. The goal of this research was to examine the same two questions, and to also see if the results varied among the two groups and if so, why.

LITERATURE REVIEW

When researching motivation and foreign language acquisition, two figures and the models they created stand out: Robert C. Gardner's 'Socio-educational model' and Zoltan Dornyei's 'Socio-educational model'.

Gardner established his 'Socio-educational model' as a model for understanding motivation over fifty years ago (Gardner & Lambert, 1959). His model is broadly divided into two types of motivation: instrumental and integrative motivation. Instrumental motivation relates to things such as test scores, college admissions, and job acquisition. Alternatively, integrative motivation concerns a learner's desire to embrace the target language's culture and community, which Gardner singles out as being a more significant determiner of motivation for students.

Additionally Gardner (2007) emphasizes the unique nature of motivation as regards to the acquisition of a second language. Whereas for most scholastic subjects the educational context is a given in terms of understanding the roots of motivation, second language acquisition requires examination of the cultural context related to the second language. Common scholastic subjects are taught almost entirely within the student's native culture while language study requires the taking on of cultural traits such as pronunciation or vocabulary to successfully acquire the new language. Thus educationally relevant variables are as significant as culturally relevant variables.

On the other hand, Dornyei's model, the L2 Motivational Self System, consists of three components: the Ideal L2 self, the Ought-to L2 self, and the L2 learning experience (2009). Dornyei defines those components in the following manner: the Ideal L2 self is "the L2 specific facet of one's ideal self;" Ought-to L2 is "he attributes that one believes one ought to possess in order to avoid possible negative outcomes;" and the L2 experience is "situation-specific motives related to the immediate learning environment and experience (2009)."

Motivation in various models is seen as a quality predictor of student achievements. Dornyei asserts that, "Motivation is one of the main determinants of second/foreign language achievement (Dornyei 1994, p. 273). Gardner and Bernaus (2008) found that motivation is a significant positive predictor of language learning achievements.

Student motivation isn't the only type of motivation to consider. Studies have found that the motivational strategies used by language teachers influence student motivation (Dornyei, 1994; Dornyei, 2001; Bravo, Intriago, Holguin, Garzon & Arcia, 2017). Within the South Korean context, Guillauteaux and Dornyei (2008) explored the connection between the language learning motivation of students and the motivational teaching practices of teachers. The motivation orientation of language teaching (MOLT), a classroom observation instrument was created to augment self-report questionnaires for the study of 40 classrooms that included 27 teachers and more than 1,300 students. In the end, the study demonstrated a clear relationship between the use of teacher's motivational strategies and the language learning motivation of the students.

However, it is important to note that some discrepancy can exist between the self-reporting of the motivational strategies implemented by teachers and the perspectives of students. Teacher's might think they are doing one thing, but students often perceive it another way. For example, Jacques (2001) examined the motivation and preferences for teaching activities of both teachers and students. Relationships were found related to motivational characteristics and perceptions of strategy use within both the teacher and the student sample. Yet, the study found that teachers had a

tendency to rate activities more highly than the students did, an important fact that was considered while designing this survey.

More significantly, a study by Bernaus and Gardner (2008) examined more acutely the possible discrepancy between teachers' reported use of motivational strategies and students' perceived use of motivational strategies. Within the Catalan Autonomous Community of Spain, 31 English teachers and nearly 700 of their students were selected for the study. The study adapted Gardner and MacIntyre's mini-AMTB (1993) to explore the attitudes of all the participants in addition to a 26 question survey about motivational strategy use. The study concluded that motivational strategies are solid predictors of language achievement but only when reported by students, not when reported by teachers (2008).

It was the above findings that led to this survey being designed to examine motivational strategies as employed by teachers in South Korea through the student's perspective. The belief was that it would be more significant and accurate to determine how students perceived teacher's motivational strategies, rather than examining what teacher's thought about their own motivational strategies.

METHODOLOGY

Subjects

For the larger study, two groups of students were surveyed, but for this paper, only the following group was looked at. The students were undergraduate Korean university students from four Communicative English classes; standard credit-bearing classes for first year students. While the class is primarily composed of first year students, it is also open to older students. Communicative English classes are multi-skill classes designed to prepare students to study in an English speaking classroom. The students are level tested before the start of the semester and all students were placed in the highest of three possible levels. Each class size ranged from 24 students to 30 students and a total of 102 participated in the survey. The level of the students ranged from upper intermediate to near fluent. Most students had a good grasp of English and of academic language in their native language. The ages of the students ranged from 18 to 22.

Procedure

For the larger study, undergraduate and graduate school students from the same Korean university were selected to answer a survey about themselves and the motivational strategies of NKS and NES English teachers, and a few were selected for an interview. This paper only examines the feedback provided by the undergraduate group. The undergraduate students were comprised of mostly freshman students of intermediate to high English proficiency enrolled in a required English course.

The survey created was based on a survey device used by Dornyei and Cheng (2007) in a study of 387 Taiwanese English teachers that included a multitude of questions about motivational strategies and the frequency of their usage. Given the findings that showed that students' perceptions may be more accurate, the survey was adapted to be given to students and not to teachers.

The survey began with a section that asked questions to give the researchers a better idea about who the students were and that would later be used in further studies to determine if there was an educational background difference between the two groups being surveyed. The survey contained 47 items about motivational strategies and students were asked to rate the frequency of their usage by both NKS and NES English teachers. A Likert scale of 1 to 6 was utilized to avoid the possibility of neutral answers due to the large number of questions on the survey. In total there were 151 participants in the large study, and 102 were examined for this paper.

After the survey was completed, random students were interviewed to gather qualitative data that would further explain students' perceptions about the motivational strategies employed by each group. The students were asked to give the strengths of each group and to compare and contrast the strategies used by both groups.

THE RESULTS

Quantitative Feedback

The first part of the survey that contained questions about previous learning experiences provided insight into the English language learning experiences of the students. The results revealed that students had studied English for a long time, 10.4 years. Students reported that they studied 5.1 years with NES teachers and 7.5 years with NKS teachers. The overlap can be attributed to having many middle and high school programs having co-teachers. The numbers were expected and highlighted the perceived importance and emphasis on ELT in the Korean education system. In terms of years spent studying English abroad, students spent an average of 1.7 years studying English abroad, which was higher than expected.

The test scores that were optionally provided also showed that those who chose to respond were very proficient in English. The students reported an average TOEIC score (scores range from 10-990) of 915. These scores were backed up by the TOEFL scores (scores range from 0-120) that averaged 106. These scores are high and may not reflect the overall level of the group, but do reflect that the students ranged from high intermediate to near fluent.

The results of the surveys were analyzed and some obvious patterns and preferences emerged. Overall, NES teachers scored higher on average than NKS teachers. The NES teachers' average score was 4.3 compared to an average score of 3.5 for the NKS teachers. These numbers are not an indicator of preference or educational quality, rather they highlight some key differences in the motivational styles of NKS and NES teachers. The purpose of this study wasn't to show which type of teacher was preferred, rather it was to find motivational strategies and techniques that worked. The numbers as a whole show little more than an interesting pattern; however, when examined more closely, they also reveal that there are some things that NES teachers may be able to learn from the motivational strategies of NKS teachers and vice versa. The qualitative data obtained during the interviews also shed more light onto these differences.

One of the clear differences that came out was that the students reported that NES teachers used various activities and projects to facilitate a communicative and cooperative environment. On the statement, "Create opportunities so that students can mix and get to know each other better," NES teachers scored 2.6 higher than NKS teachers. This was the biggest reported difference. This is supported by another statement "Encourage student participation by assigning group activities that require involvement from each participant." NES teachers scored 1.5 higher than NKS teachers on this statement.

In terms of classroom environment, statements 1, 15, 30, and 43 again showed a higher average score for NES teachers. NES teachers scored 2.1 points higher on statement 1, "Bring in and encourage humor and laughter frequently in your class." NES teachers scored 1.2 higher on statement 15, "Make sure that grades reflect not only the students' achievement but also the effort they have put into the task;" 1.3 higher on statement 30, "Create a supportive and pleasant classroom climate where students are free from embarrassment and ridicule;" and 1.5 higher on statement 43, "Encourage students to share personal experiences and thoughts as part of the learning tasks."

The survey also showed a higher average score for NES teachers in terms of lesson content and format. Students felt that NES teachers were better able to delve into the cultural aspects of English. For the statement which said, "...familiarize the learners with the cultural background of the English language," NES teachers scored 1.7 higher. For statement 12, "...introduce in their lessons various interesting content and topics which students are likely to find interesting," NES scored 1.3 higher.

Another important difference was that the students felt that NES teachers did a better job of communicating the importance of communicative competence, while NKS teachers were more focused on grammar. For the statement that said, "Make it clear to students that the important thing in learning a foreign language is to communicate effectively rather than worrying about grammar mistakes," NES teachers scored 1.8. While this may seem like an obvious advantage, the qualitative feedback showed that a strong focus on grammar was also valued by the students, as they felt it better prepared them for standardized testing. This could be an area where both groups could learn from each other.

Providing grammar-focused lessons that relate to standardized testing can be viewed in terms of providing instrumental motivation and other scores supported this. NKS teachers scored better in terms of practical motivation and instrumental motivation. While NES teachers scored better on statements that related to integrative motivation, NKS teachers scored higher on statements related to instrumental motivation. NKS teacher's emphasis on stressing the importance of English for their lives and career was reflected in statement 9, "Regularly remind students that the successful mastery of English is beneficial to their future." NKS teachers scored .9 higher on this statement.

In addition to scoring higher on items concerned with instrumental motivation, NKS teachers also scored higher on items related to promoting realistic goals for students. NKS teachers scored .4 higher on statement 10, "Encourage students to select specific, realistic and short term learning goals for themselves." In addition to helping students select short term goals, this also shows an emphasis on giving the students responsibility, as the goals were selected by the students themselves and not prescribed by the teacher.

Overall, the quantitative data revealed many patterns. NES teachers scored better on segments that related to integrative motivation. Students felt like the classroom environment, cultural aspects, content, and the format of the classes showed stronger signs of effective motivational strategies for NES teachers. On the other hand, NKS teachers scored better on statements related to instrumental motivation and practical goal setting.

Qualitative Feedback

Immediately after the survey results had been collected and partially analyzed, a group of students from both the undergraduate group and the graduate school group were interviewed to aid in the interpretation of the data. The students were asked to describe the differences between NKS and NES English teachers in terms of motivational strategy and assess the strengths of both groups. The purpose of the interviews was to obtain qualitative data and to see if the students could provide some insight into the data.

The undergraduate students stated that NES teachers were more likely to utilize group work and interactive discussions. They also stated that various types of content such as video clips, language content that is practical in nature, and interactions with native speakers highlighted the practicality of using English for communicative purposes. Additionally they indicated that they felt that NES teachers maintain a more relaxed atmosphere in the classroom than their NKS counterparts. Teacher demeanor and desk arrangement were two of the most common examples of how NES teachers created a more relaxed classroom environment. While they were positive about the atmosphere created by NES teachers, they felt that the atmosphere created by NKS teachers was more structured and utilized clearer forms of assessment. They felt like the assessments provided by NKS teachers were more familiar and comfortable. Overall, student comments showed that students liked the practicality and comfortable environment of the NES teachers' classroom, but preferred the more traditional and familiar assessments given by NKS teachers.

DISCUSSION

Limitations

There were two main limitations to this study. First, it lacked specificity. Students were asked to generalize quite broadly about years of experience with a variety of teachers which amounts to a considerable amount of over-generalization. Still the research questions were created based in part on student tendencies to make such generalizations in their remarks about classroom environments. Also, the addition of the interview was added to get beyond some of the generalizations and to try to get more specific information.

The most serious limitation was that the study was conducted by native English speakers to Korean students. Students knew the teachers conducting the research and reviewing the data and this may have skewed opinions even at a subtle level. Utilizing a third party in future studies may be a reasonable remedy for this situation. It would be also interesting to have NKS teachers give the same survey to similar groups of students to see if this had an influence on the results.

Implications for Education and Further Research

The study revealed some clear opinions about the differences between the motivational strategies of NES and NKS teachers. In the right environment, these differences could be discussed between the two groups, in hopes of learning from each other and ultimately creating a better educational environment for students. Often both sides take a defensive view and refuse to see the strengths that both groups pose. Rather than looking at these differences in terms of good and bad, teachers should first look to acknowledge the differences that exist and try to learn from the differences. One thing the data did reveal is that students see English as both a way to communicate and as a tool to achieve practical goals.

One of the conclusions of this survey is that different goals drive the usage of differing motivational strategies but it would be interesting to see how teacher training for both groups generally differs. Also, it would be interesting to see if and why both groups have different goals and if the motivational strategies they employ are chosen because they think they are the best way to achieve those goals. Further studies could explore the reasons for the use of different strategies and whether or not these strategies are effective for their respective goals as suggested by some students. Does a highly instrumental motivational strategy result in higher scores on standardized tests? Does exposure to culture in the classroom lead to greater interest in the language? These are possibilities that should be explored.

This paper is also part of a larger project involving this group of participants and graduate school students, to see if there are any differences between the two surveyed groups. The results may or may not show a difference due to age, experience, and language ability.

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Pharmaceutical Fraud: Off-Label Marketing Of Drugs In The United States, 2009 - 2016

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The Federal False Claims Act (FCA) is a law that enforces liability on companies (or persons) who defraud government programs. The FCA is also known as “Lincoln Law” due to the fact that it was our 16th President who signed this law in 1863. Its original purpose was to combat fraud against the United States Army during the Civil War. Under the original FCA private citizens could file a lawsuit on behalf of the government and receive a percentage of the recovery. This is known as “qui tam”, referring to the Latin expression “qui tam pro domino rege quam pro se ipso in hae parte sequitur” which means, “who sues on behalf of the King as well as for himself.” This was part of the FCA legislation to encourage citizens to report wrongdoing against the government.¹

Over the last 150 years, Congress has amended the FCA on three occasions. In 1986 special incentives for whistleblowing insiders were added. Up until the 1990s the FCA had mainly been used against defense contractors. Health care fraud then became an emphasis. This led to the amendment of 2009, the “Fraud Enforcement Recovery Act”. The 2010 changes were specific to health care under the “Patient Protection and Affordable Care Act”.

The False Claims Act has been somewhat effective in combating fraudulent claims by pharmaceutical manufacturers. With the whistleblower provision being implemented in 2009, this has increased the cases being brought under the FCA. According to the Department of Justice (DOJ) website over \$19 billion has been collected from the pharmaceutical companies for various violations of the FCA including billing, marketing and pricing schemes.² It is believed, however, that this is simply the insignificant portion of something much, much bigger. Some of the more common schemes that the drug companies have frequently utilized that may violate the FCA include:

- Off-label Marketing of Drugs: the use of pharmaceutical drugs for unapproved purposes, dosages, ages, etc. Pharmaceuticals in the United States are highly regulated by the Food and Drug Administration (FDA). The drugs must be rigorously tested before approval and the FDA determines exactly which medical conditions, ages, and dosages the drug may be used to treat. Drug companies that promote their drugs to physicians for an off-label or an unapproved use are in violation of federal law.³
- Illegal Kickbacks: a common scheme that the pharmaceutical companies have been found guilty of is providing payments or other financial incentives to healthcare providers in order to persuade them to prescribe their drugs to patients. Also, kickbacks have been known to be paid to the insurance companies in order to have their drugs listed as those “preferred” to be prescribed to the insurance coverage.
- Inflated Pricing of Pharmaceuticals: one of the most common schemes used by pharmaceutical companies is inflating the prices of their drugs, or reporting to the government what the average price for which the drug wholesalers sell the specific drugs to their customers. By reporting a higher average price, this increases how much the Medicare and Medicaid programs must pay for those particular drugs.⁴

METHOD

Our research focused on all cases involving pharmaceutical manufacturers through False Claims Act (FCA) violations, specifically the Off-Label Marketing of Drugs. This law allows for private citizens to file antifraud actions on behalf

¹ Berg & Androphy, 2017

² Department of Justice (DOJ) website

³ Off-Label marketing, Medicare, Medicaid, and qui tam (whistleblower) lawsuits, 2017

⁴ False Claims Act Resource Center, 2017

of the government and this imposes liability of up to triple damages along with civil penalties for each claim, with the citizens receiving a percentage of the reclamation. We used meta-analysis to gather information from previous research. We also compiled our own data on the total settlement as well as the amount received by the qui tam relators. Data was collected from Lexis/Nexis and Department of Justice websites. Financial recoveries of less than \$5 million were excluded.

RESULTS

There were 22 cases in the eight years that our research covered. The total amount collected in the eight years was over \$14.1 billion (Table). This was only those cases related to Off-label marketing. One company, Pfizer Corp., was involved in 4 of the 22 cases totaling \$3,448 million over a five-year period. Johnson & Johnson Corp. settled 3 cases for a total of \$2,299 million.

Settled Federal False Claims Act Cases Involving Pharmaceutical Product Manufacturers (2009-2016)						
Company	Headquarters	Year	All \$ amounts in Millions		Violation	Product (type/FDA approved usage)
			Total Recovered	Amount Recovered by Qui Tam Filers		
Eli Lilly and Company	Indianapolis, Indiana, United States	2009	\$ 1,400	\$ 438	Off-label promotion	Zyprexa (antipsychotic, for schizophrenia and bipolar disorder)
Pfizer	New York, New York, United States	2009	\$ 2,900	\$ 102	Off-label promotion	Bextra (NSAID), Geodon (anti-psychotic for Schizophrenia/acute mania/mixed bipolar states), Zovox (antibiotic), and Lyrica (for epilepsy, neuropathic pain, fibromyalgia, and general anxiety disorder)
Pfizer (Alpharma)	Bristol, Tennessee, United States	2010	\$ 42.5	\$ 5.33	Off-label promotion	Kadian (extended-release morphine)
AstraZeneca	Cambridge, England	2010	\$ 520	N/A	Off-label promotion	Seroquel (anti-psychotic for schizophrenia, bipolar disorder, and major depressive disorder)
Johnson & Johnson (Ortho-McNeil Pharmaceutical and Ortho-McNeil-Janssen)	Raritan, New Jersey, United States	2010	\$ 81	\$ 9	Off-label promotion	Topamax (anticonvulsant/antiepilepsy)
Novartis International AG	Basel, Switzerland	2010	\$ 72.5	\$ 7.8	Off-label promotion	Tobi (antibiotic)
Allergan, PLC	Dublin, Ireland, and Parsippany-Troy Hills, New Jersey, United States.	2010	\$ 600	\$ 37.8	Off-label promotion	Botox (neurotoxic protein, for headaches, neck pain, cervical dystonia, and axillary hyperhidrosis)
Novartis International AG	Basel, Switzerland	2010	\$ 422.5	\$ 25	Off-label promotion/kickbacks	Trileptal (anticonvulsant, for treatment of partial seizures associated with epilepsy)
Forest Laboratories, Inc.	New York, New York, United States	2010	\$ 313	\$ 14	Off-label promotion/distribution of an unapproved drug (Levothroid)	Levothroid (thyroid hormone), Celexa (SSRI/antidepressant, for major depression), and Lexapro (SSRI/antidepressant, for major depression and generalized anxiety disorder)
Élan Corporation, PLC (acquired by Perrigo Co. in 2013)	Dublin, Ireland	2010	\$ 214.5	\$ 10	Off-label promotion	Zonegran (anticonvulsant, for Parkinson's disease, partial-onset seizures, Lennox-Gastaut syndrome, and other seizures)
Abbott Laboratories (Kos Pharmaceuticals)	Lake Bluff, Illinois, United States	2010	\$ 41	\$ 6.4	Off-label promotion/kickbacks	Advicor (Niacin & Lovastatin mix, for dyslipidemia and Niaspan (Niacin, for cardiovascular disease, etc.)
UCB	Brussels, Belgium	2011	\$ 34	\$ 2.8	Off-label promotion	Keppra (For epilepsy)
Pfizer	New York, New York, United States	2011	\$ 14.5	\$ 3.3	Off-label promotion	Detrol (antimuscarinic, for urinary incontinence)
Abbott Laboratories	Lake Bluff, Illinois, United States	2012	\$ 1,500	\$ 84	Off-label promotion	Depakote (For epilepsy, bipolar disorder, and prevention of migraines)
GlaxoSmithKline	Brentford, United Kingdom	2012	\$ 3,000	\$ 34	Off-label promotion/kickbacks	Paxil, wellbutrin, avandia and other drugs.
Pfizer (Wyeth Pharmaceuticals)	New York, New York, United States	2013	\$ 490.9	N/A	Off-label promotion	Rapamune (immunosuppressant, for coronary stents and prevention of organ transplant rejections)
Johnson & Johnson	New Brunswick, New Jersey, United States	2013	\$ 2,200	\$ 167.7	Off-label promotion/kickbacks	Risperdal (antipsychotic, for schizophrenia, bipolar disorder, and irritability in Autistic individuals), Invega (dopamine antagonist/antipsychotic, for bipolar disorder, schizophrenia, and schizoaffective disorder) and Natrecor (cardiovascular amino acid recombinant, for types of congestive heart failure)
CareFusion	San Diego, California, United States	2014	\$ 40.1	\$ 3.26	Off-label promotion/kickbacks	ChlorPrep (surgical disinfectant & antiseptic, for skin & surgical instrument disinfection/sterilization before surgical application)
Endo International, PLC (Endo Pharmaceuticals)	Dublin, Ireland, and Malvern, Pennsylvania, United States	2014	\$ 192.7	N/A	Off-label promotion/kickbacks	Lidoderm (Lidocaine/local anaesthetic, for numbing)
Johnson & Johnson (Acclarent)	New Brunswick, New Jersey, United States	2016	\$ 18	N/A	Off-label promotion/misbranding	Sinus Spacer Product (distributed as a drug delivery method after FDA denial to expand the product's approved usages)
BTG PLC (Biocompatibles Inc.)	London, United Kingdom	2016	\$ 36	N/A	Off-label promotion/misbranding	LC Bead (embolization device, to be inserted into blood vessels to restrict bloodflow to tumors)
Bristol-Myers Squibb Company	New York, New York, United States	2016	\$ 19.5	N/A	Off-label promotion/misbranding	Abilify (antipsychotic, for schizophrenia and bipolar disorder)
Totals:			\$ 14,152.70	\$ 950.39		
			14.1 billion	950 million		

Although only involved in one of the 22 cases we discovered, the largest healthcare fraud settlement in United States history is the \$3 billion paid out by GlaxoSmithKline (GSK). They settled the suit when they pled guilty to the off-label marketing of two different drugs for uses that had they had not been approved. The pharmaceutical giant admitted that they had held certain information back from the Federal Drug Administration (FDA) and they had made unsupported claims over certain drugs. Plus, GSK admitted to paying kickbacks to doctors to prescribe and promote their drugs for the off-label purposes. The settlement covered both criminal and civil fines with the federal and state governments. GlaxoSmithKline paid their \$3 billion fine out of their cash reserves immediately upon learning of their penalty.⁵ From 1991 through 2015, GSK paid financial penalties of \$7.9 billion to federal and state governments. This is double what any other pharmaceutical company has paid.

The United States pharmaceutical industry was worth an estimated \$446 billion in 2016. The United States holds over 45 percent of the world's pharmaceutical marketplace. Six out of the top ten drug companies in the world are from the U.S. It is said to be the "world's most important national market"⁶. The largest pharmaceutical company in the United States in 2015 was Pfizer Corporation. Their revenue in 2015 was almost \$49 billion. (in November of 2015 Pfizer merged with an Irish company and moved their headquarters to Ireland, thus lowering their tax rate by almost half).⁷

DISCUSSION

Since 1996, \$19 billion has been collected from pharmaceutical companies for various pricing, billing and marketing schemes that are in violation of the Federal and State False Claims Acts. So, in relation to the 2008 bank bailout, the American banks were said to be "too big to fail." But, the bank bailout of 2008 was only \$700 billion.⁸ The pharmaceutical companies just keep getting bought up and are currently in the "too big to fail" category in the United States. Once one starts to go down, it's just bought up by another: similar to how banks were in 2008. But, remember how the bank collapse ruined the United States economy. Stocks plummeted, mortgages became too expensive, peoples' money became worthless. Think of how a failure in the prescription medication industry would affect the country. People already cannot afford their medications, which they desperately need. In 2015, Martin Shkreli raised the price of a malaria medication by a factor of 56, making it almost \$700/pill. When pricing fraud like this occurs, it's not a matter of just the economy. People die when they cannot afford their medication. It is becoming all too common for people to have to choose between buying food or buying their medication.

As a fraudulent industry with sales above \$1 trillion in 2014 (\$450 billion in the U.S. alone), the pharmaceutical industry is notorious for hiring former government employees in an effort to farm their political connections to gain political standing. The trade group PhRMA actually has 50+ former and current employees who used to work in the government. These include 36 former Congress members, 13 who used to work for federal agencies, 12 who were a part of a congressional committee, 2 formerly worked for the White House, and one who was employed by the court system.⁹ These political connections give the pharmaceutical industry a significant advantage over other industries. Pharmaceutical companies are already protected from free-market competition. That's a perk that only U.S. pharmaceutical companies have (as well as marketing directly to doctors and consumers, those methods aren't typical in European countries).

Pharmaceutical companies need to be held to a higher standard in the United States. They go widely unregulated and while it seems as though they're bleeding money from all the settlements they expense out, the amount of fraud inherent to keep the companies alive is blatantly apparent and needs to be cracked down on before it becomes paralleled with the 2008 housing crisis. The United States produces and purchases more than 47% of the world's pharmaceuticals, which is far more than any other country on the planet. The fact that they are not subjected to free-market competition only makes it easier for the bad guys to get richer while everyone else gets sicker.¹⁰

⁵ BBC News, 2012

⁶ Statista, 2017

⁷ Mole, B. 2015

⁸ Amadeo, Feb. 2017

⁹ Drugwatch.com, 2017

¹⁰ Vallverde, J. 2013

The high costs of pharmaceuticals in the United States are not only the fault of the companies, however. Just recently, July 2017, the Attorney General announced that charges were being filed against 412 doctors, nurses and pharmacists in what he called, “the largest health care fraud enforcement operation in U.S. history.” (Johnson). In this particular case, one doctor has been accused of writing more than 12,000 prescriptions for opioids. That is the equivalent to more than 2 million illegal doses. Other doctors have been accused of writing more prescriptions for opioids than an entire hospital would normally write. This inflated demand, leads to inflated costs. Abuse of the expensive painkillers can then lead addicts to cheaper alternatives, mainly heroin. In this same case, a group of six Michigan doctors are accused of providing patients with unnecessary opioid prescriptions and then billing Medicare for \$164 million. Some of those same prescriptions ended up being resold on the streets to addicts.¹¹

CONCLUSION

Our analysis has limitations, principally the absence of other FCA violations other than off-label marketing. Despite this, our analysis emphasizes that many of the larger pharmaceutical companies have been implicated in health care fraud cases, sometimes more than once. With the growth of the health care industry, investigations into the manufacturers of pharmaceutical drugs will continue to result in significant recoveries. Our research also raises concerns that despite these sizeable recoveries, industrywide changes are much needed.¹²

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¹¹ Johnson, 2017

¹² Qureshi et al., 2011

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Physics Instruction And Outreach With The IO Lab Device

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ABSTRACT

Demonstrating physics principles via measurement often requires expensive laboratory equipment and workspace. New technologies, in much more affordable price ranges, have allowed for precise measurement to occur on-site, anywhere. Able to operate with nearly any computer or laptop, the IO Lab device allows learners to experiment, exploring physics principles via measurement and analysis. Recently, these devices have been used to facilitate instruction in nearby high schools, as part of the College Credit Plus program, where students earn college credit for completing selected courses while in high school. The instructor is able to rely on having the necessary equipment for detailed demonstrations, and is able to provide several for students to use in exploratory activities.

The Influence Of Nonverbal Cues On The Employment Interview

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ABSTRACT

Building on literature on cognitive matching, the aim of this study is to test the impact of nonverbal behavioral on hiring decision during the employment interview. A sample of 300 real job applicant provided personality and GMA measures and participated in a mock interview during which the candidates received evaluations on their hireability.

As expected, while findings show a strong impact of nonverbal behavioral on hiring decision and rating of employment suitability, we found a lack of correspondence between nonverbal cues and personality and GMA measures. Moreover, the rate of positive responses varies according some of the recruiter's characteristics. Results are robust to various sensitivity checks. Implications of the results, limitations of the study, and directions for future research are discussed.

Keywords: Nonverbal, employment interview, hiring, personality

Auditing Through the Blockchain – The Challenges of Smart Contracts and Cryptocurrencies

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ABSTRACT

With the growing popularity of blockchain technology many of the hallmarks of verification that have been available to auditors may be hidden behind such mechanisms and “dark wallets” and anonymous exchanges. While the blockchain promises to reduce transaction costs, cut out middlemen, and generally streamline contract execution, auditors are faced with a new challenge to the “audit trail” once used to verify the validity and recording accuracy of economic transactions. Confronted by a black box of technology that controls contract execution and may shelter critical contract details from outside scrutiny, auditors must think of new ways to verify and authenticate counterparties, and develop new techniques for establishing the veracity of electronic currency transfers. With the Bitcoin universe already suffering from its reputation as a playground for illicit behavior, the blockchain must outgrow this perception, and auditors could lead the charge to credibility for this promising technology.

Designing An Assignment That Is An Effective Motivator For Non-Marketing Majors In An Introductory Marketing Class

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ABSTRACT

At times required basic business classes end up at the bottom of the list for students who are not planning to major in that field. They sometimes can't see the importance of that field to their own planned career choices. While writing a marketing plan for a business is often exciting for marketing majors, it may leave non-majors less than enthused. The purpose of this assignment is to entice non-marketing majors to invest as much effort and excitement as marketing majors into the semester project.

A cooperative learning method is used to during the semester for a variety of in-class exercises. Groups of a variety of majors work together during the term reinforcing the importance of marketing for all majors. Students stay with their group during the whole term and sit together with them to do in-class assignments throughout the semester. Through their work across fields on a variety of marketing and branding exercises the students begin to appreciate their different skills and attitudes. While the semester project is an individual assignment, the group members get many chances to polish their project through their team members' input.

The students develop a marketing plan for their own careers and at least start to research a variety of industries, companies, and potential job opportunities.

(References upon request)

Trust And Communication: Vital Components Of A Successful Healthcare Merger

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ABSTRACT

Mergers and acquisitions (M&A) are a growing phenomenon in the business world as companies are expanding their market share to compete globally. At some point, 1 out of 3 workers will be involved in an M&A. Guided by the social exchange theory, the purpose of this descriptive case study was to determine the factors that might influence satisfaction and engagement levels of health care employees who had recently been through an M&A. The study population consisted of 4 leader and 4 nonleader employees employed at a healthcare facility in the North Central United States. All employees had been employed at the facility prior to and after the M&A and were current employees at the time of the study. Data were collected through audio-recorded, semistructured interviews as well as document review of company materials such as the employee handbook, mission, and vision. Increased trust and emotional engagement, and frequent and transparent communication were found to be prevalent themes discovered during data analysis. Postmerger, these leaders had implemented changes regarding the corporate belief structure, advocated increased communication and teamwork, and promoted open and direct communication among staff and leadership. These findings may assist healthcare leaders who are going through an M&A with increasing employee satisfaction and engagement.

The Relationship Between Coachability And Organizational Commitment

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ABSTRACT

According to Murphy (2006), a Leadership IQ study found that 26% of new hires who fail within 18 months, fail because they lack coachability. Coachability, as defined by Leadership IQ, is the ability to accept and implement feedback from bosses, colleagues, customers, and others. Murphy (2006) suggested that managers should focus more on coachability and less on technical competence when recruiting.

Although there are similarities between athletics and business, the coachee's readiness for coaching has not been thoroughly explored in either arena (Giacobbi, 2000). In business research, there is currently only one published article that focuses on and measures coachability (Shannahan, Shannahan & Bush, 2013), and a few unpublished articles that attempt to develop a coachability scale (Ciuchta & McMahon, 2015; Miller & Gurung, 2005; Read, 2006).

Shannahan et al (2013) examined the relationship between a salesperson's coachability and sales performance. The results suggested that when salespeople are highly coachable, highly competitive, and under transformational leadership, their sales performance is the highest. Ciuchta and McMahon (2015) suggested that coachability offers great potential for future research and practical significance.

The purpose of this study was to examine the relationship between coachability and organizational commitment. Specifically, can coachability increase organizational commitment? The researcher utilized convenience purposeful sampling in this study by surveying individuals in one Texas Public University M.B.A. Program enrolled in the Spring 2017 semester (n=107). A one-way analysis of variance (ANOVA) was conducted to compare the effect of coachability on organizational commitment. The results indicate that an individual's coachability is predictive of organizational commitment.

This study adds to the very limited body of existing research for employee coachability and its effects on positive work outcomes. This research shows that identifying potential employees who are stronger in the areas of coachability prior to hiring could increase positive work outcomes associated with organizational success. The Athletic Coachability Survey focused on athletic coachability. Consequently, there needs to be a valid and reliable tool that is available to business recruiters to identify these soft skills as a pre-hire assessment.

Mindfulness Curriculum As Part Of A Medical Education Training Program

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ABSTRACT

A training course in mindfulness, as part of a Graduate Medical Education interprofessional training programs' larger-content medical education training curriculum will enrich the academic rigor and practical training experience. Seminal research has suggested that mindfulness reduces psychological distress and burnout, increasing primary care providers' capacity in relating to patients and meaningful reflection through practices; all of which are integral in the support and development of mindfulness education in 21st century health care. A growing trend of transformative medical education programs are seeking to innovatively integrate mindfulness programs into the medical education program structure. Participants of this curricular program included trainee participants from a primary care medical education interprofessional program, in affiliation with a United States Veterans Health Administration academic medicine and healthcare organization. Participating trainees included physician residents, nurse practitioners, health psychology residents, pharmacy residents and social work students. The mindfulness training course, was integrated into the structured didactic lecture component of the training program, and administered by training administrator and wellness committee faculty member subject matter experts. Participants were also provided with access to mindfulness training methods and resources during and after the training session. Evaluation of the session usefulness, applicability and generalizability was assessed using a Likert Scale (qualitative) and open (qualitative) response standardized Singh, Lawrence and Headrick (2011) standardized Minute Paper evaluation tool.

Keywords: mindfulness, wellness, medical education, training, burnout

INTRODUCTION

A mindfulness training course, as part of the Primary Care Education (PCE) program's larger-content medical education training curriculum is intended to further enrich the interprofessional training program academic and training rigor. Mindfulness, as described by Kabat-Zinn is the practice of moment-to-moment, open-hearted awareness, and focus on the present moment (Kabat-Zinn, 1990). The operational definition of mindfulness has asserted to mindfulness involving a two-component model of mindfulness (Bishop et al., 2004); the first component involving self-regulation of attention and recognition of events, and the second component being one's personalized orientation to and acceptance of the present-moment experience. Current health care training models are challenged in the development and practical application of mindful skillsets. Pressures related to daily challenges in practice such as time constraints, distractions and difficult patient cases contribute to barriers in the development of mindfulness skillsets and the utilization of such skills in the practical setting. Seminal research has suggested that mindfulness reduces psychological distress and burnout (Rosenzweig et al., 2003), increasing primary care providers' capacity in relating to patients (Krasner et al., 2009) and meaningful reflection through practices such as narrative medicine (Charon, 2001); which all are integral in the support and development of mindfulness education in 21st century health care. Transformative primary care education programs seeking to provide mindfulness programs have thought to research, and for some, even successfully begun to integrate mindfulness and varying forms of arts and humanities programs into their medical education programs. The mindfulness curricular project takes form of a curricular product; offered as an interactive, didactic education session. The session, lasting for approximately two-hours of direct training time; includes a half-hour didactic lecture on the topic of mindfulness, a one-hour interactive workshop session covering mindfulness practices and concludes with a half-hour opportunity for self-guided mindfulness toolkit construction.

BACKGROUND

Historical Content & Contemporary Issues – American Health Care Systems

On March 23rd of 2010, President Obama signed the Patient Protection and Affordable Care Act (PPACA), commonly referred to as the Affordable Care Act (ACA). The ACA is a comprehensive health reform, which signed into law the overall approach to expanding access, legally binding all U.S. citizens and legal residents to have health care coverage (42 U.S.C. 18001 et seq., 2010). Key features of the ACA aim to make health care more affordable, accessible and of a higher quality for all United States citizens regardless of marital, employment or socioeconomic status. Various reasons prior to the ACA why Americans had not utilized healthcare included issues such as high costs of carrying insurance, no insurance coverage due to employment status, or employers previously not being required to offer employees insurance plan options. Many of these issues have now become either outlawed and/or obsolete, resulting in healthcare opportunities which are of both increased accessibility and quality. This change to the American health care system has resulted in a massive influx of Americans seeking healthcare who had not previously sought it.

Americans are seeking and utilizing health care in historical numbers. Counterintuitive to the historical utilization of healthcare in America is the fact that there is the reality of an increasing shortage of primary care physicians (PCPs), both present and projected, in the United States. Many scholarly articles, reports and projection studies have taken a look at the professional track records along with some of the elements as possible cause to increasing the shortage of PCP's in the United States. Article by Silverman (2016), presents the case examining various elements of why the possible shortages in PCPs exist and what may be done to address it. Many times, the common theme comes down to economics. Many physicians, coming out of medical training are so high in education debt that they simply cannot afford to take positions as PCP's. PCPs make an average of \$195,000 annually, whereas specialty care counterparts make salary averages of \$284,000 (Silverman, p.1, 2016).

According to Silverman (2016), the growing shortage of PCPs, projected to reach 90,000 PCPs by the year 2025; many states and health care locations are taking on models of teams-based care. Many health care systems and professionals are increasing their scopes of practice, permitting them to do more of what PCPs have traditionally lead in providing and managing patient care. Note the cases in which nurse practitioners are taking on increased numbers of patient cases and are now being permitted to practice a full scope of patient care abilities and are authorized to prescribe many previously unauthorized medical orders and prescriptions (Silverman, p.2, 2016). In addition to nurse practitioners expanding upon their scope of practice; so have physician assistants, resulting in the narrowing of PCP gap shortages (Bodenheimer and Willard-Grace, 2016). Bodenheimer and Willard-Grace (2016) also elaborate on the roles of primary care "teamlets" as a functional team whose members from various professions (e.g. registered nurses, nurse practitioners, pharmacists, medical assistants, physician assistants) take over segments of a patients' care, which adds capacity without increasing stress on the primary care providers. By increasing the scope of practice for many health care professionals, it has allowed some immediate relief in the face of the PCP gap. Practical changes in professional practice standards has permitted an increase in interprofessional teamwork amongst health care providers as a means to addressing the high demands in patient care needs. In addressing possible means to confronting issues in health care access, defined by difficulties in primary care provider trajectories, geographic maldistribution and varying organizational issues; authors Bodenheimer and Pham (2010) add to the discussion surrounding the problems and proposed solutions to the primary care shortage. Bodenheimer and Pham (2010) examine the patient case capacity of providers, defined as panel size, whereas panels of more than 2,000 patients are defined as less efficient in providing high-quality care. Alvarez and Marsal (2015) suggest that the U.S. average of primary care physician is expected to decline by 27.9 per cent between the years of 2010 to 2020 (p.1). The American Association of Medical Colleges (AAMC) support findings the shortages and projection findings of Alvarez and Marsal (AAMC, 2015).

Shifts in 21st Century Medical Education

In addition to empirical data regarding projected shortages, researchers from the Jackson Healthcare Corporation conducted an in-depth study of declining physician morale (Jackson Healthcare, 2015). Alvarez and Marsal (2015) suggest that as the shortage-gap increases, the professional satisfaction of physician providers decreases (see Figure A3 for Alvarez and Marsal's shortage gap and satisfaction decrease tables). Two suggested solutions to this issue are either to attract more students into primary care or to create primary care teams, which allow for delegation of duties

to other team members who may be able to address tasks, which do not require high-level of medial skills. Bodenheimer and Pham (2010) also suggest considering after-hours access, tele-health monitoring and visitation methods (e.g. e-mail and telephone visits) and the formulation of primary care teams. These teams, also referred to as “teamlets” (Bodenheimer & Pham, 2010), consist of health care staff and professionals such as Medical Assistants and Health Coaches; trained in counseling and assisting patients with needs such as lifestyle changes, medication adherence and in managing other chronic health conditions.

The World Health Report (2010) defines interprofessional education as, “When students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes” (WHO, p.13, 2010). In May of 2011, the American Association of Medical Colleges (AAMC), in conjunction with the Interprofessional Education Collaborative (IPEC) organization, held an annual summit addressing the core competencies for interprofessional collaborative practice. The AAMC (2011) annual collaborative summit report addressed interprofessional teamwork as “the levels of cooperation, coordination and collaboration characterizing the relationships between professions in delivering patient-centered care” (AAMC, 2011, p. 2); and it identified professional competencies in health care as “integrating enactments of knowledge, skills, values, and attitudes defining the domains of work of a particular health profession applied in specific care contexts” (AAMC, p.2, 2011). The nature of transformative, interprofessional change requires structured developmental programs and learning opportunities consisting of professional and practicum development, and addressing the needs of interprofessional and team-based learning in the workplace. Interprofessional practice requires that providers effectively communicate, collaborate and provide care aligning with that of other healthcare professionals across various disciplines.

The VHA Center of Excellence in Primary Care Education is managed by the National Offices of Academic Affiliations, which has outlined the professional standards of interprofessional education to be developed and assessed by the (four) primary care education professional learning outcomes addressed as shared decision-making, sustained relationships, interprofessional collaboration, and performance improvement (National Office of Academic Affiliations [OAA], p.3, 2010). The National Office of Academic Affiliations, as governing body of VHA healthcare care training and education programs, oversaw the rising issues related to healthcare models of care, transformative healthcare teaching models and implementation methods. In the spring of 2010, OAA released a call for whitepapers for VHA Primary Care sites, interested in researching, adopting and transforming new methods of effective, interdisciplinary primary care education and training models (OAA, p.2, 2010). In the fall of 2010, the PCE returned its competitive proposal for the white paper call, to be selected for a grant-funded award of \$1million dollars to sustain interdisciplinary, transformative primary care education models in research, training and implementation.

In January of 2012, the PCE site would launch the (then), four-year grant-funded program titled, “Transforming Outpatient Care Center of Excellence in Primary Care Education (OAA, 2012)” program. As seventeen other National VA PCE sites competitively applied for the OAA Request for Proposal (RFP) grant (OAA, 2010), the PCE site was met with an award as first place RFP competitor. In addition to the PCE site, four other national sites were also awarded the four-year grant-based funding in support of medical education re-design, implementation and quality improvement towards transformation PCE models at their respective VHA Primary Care sites. VHA Medical Centers are identified as nationally recognized ‘teaching hospitals’, in which its health care trainees are affiliated with a medical school. The VHA provides practical, hands-on training for its medical trainees. Due to the success of the first four-year term phase of the PCE program, the site gained award of an additional four years of funding, sustaining its programs through academic year 2019. Progressive actions are in formation concerning additional funding and permanent sustenance beyond the current academic years and phases through 2019.

Integrating a Mindfulness Curriculum in Medical Education Programs

The purpose of this curricular project is to present mindfulness training opportunities as part of a broader interprofessional training program; impacting the PCE trainees’ satisfaction, reflection and compassion skillsets in addressing personal/practical/patient-care encounters. The PCE program aims to “Transform Outpatient Care (TOPC) by empowering physician, nurse practitioner, pharmacy, social work and psychology trainees of the 21st century with skills to effectively lead and participate in patient-centered interprofessional teams that both meet the needs of patients and provide consistent high quality care” (TOPC-CoEPCE, 2015, page 1). The PCE program is guided by the identified Four Domains of Professional Development (i.e. learning outcomes) identified as “shared decision making

(SDM), sustained relationships (SR), interprofessional collaboration (IPC), and performance improvement (PI)” (OAA, 2013). The PCE program utilizes the Four Domains of Professional Formation as a respective guide for its transformative and immersive curriculum program. Following the immersive nature of the PCE program, this curricular product, offered in the form of a training course session, will afford trainees with the opportunity to engage in mindfulness training programs in the context of a free will and open environment for learning. Current health care training models are challenged in the development and practical application of mindful skillsets. The purpose of this curricular project is to present mindfulness training opportunities as part of a broader interprofessional training program; impacting the PCE trainees’ satisfaction, reflection and compassion skillsets in addressing personal/practical/patient-care encounters.

Upon deeper analysis of the PCE curriculum; various areas in the PCE immersive curricular elements, presenting opportunities for trainees to learn with, for and about their patients (i.e. provider-to-patient) and one another (i.e. provider-to-provider) were identified. However, there were no curricular/development opportunities currently present in the curriculum model which addressed trainee wellness/mindfulness under the complex and challenging 21st century approach to providing quality transformative care. Between January 2012 and December 2014, 64 evaluations were completed and collected following the PCE arts and humanities education program sessions. Upon synthesis and review of quantitative and qualitative Minute Paper (Singh, Lawrence and Headrick, 2010) feedback, trainee-participant data revealed themes which suggested implicit elements of “somatic learning” content (Merriam et al., p. 192, 2007) and mindfulness content. The standardized Minute Paper (MP) evaluations, which is a self-reporting evaluation tool; consists of three open-ended questions asking, “what are the major take-home lessons, what questions remain, what would you suggest for improvement” (Singh et al, 2010). In addition to the qualitative questions, are three additional Likert Scale response sections asking session participant about session overall rating, usefulness and increases in learning and confidence. By the process of thematic analysis, the qualitative data was extracted and coded for common feedback and themes. Trainee-participant feedback revealed themes suggesting commonalities of implicit somatic learning and mindfulness elements of the hidden curriculum. In identifying these trends in the curriculum, PCE curricular specialists agreed that a curriculum should be developed which provides explicitly somatic learning opportunities on the topic of mindfulness. Buy-in from stakeholders was secured and the development of an appropriate mindfulness topic and session began.

Training Context

As the PCE aims to train 21st Century Healthcare Providers in using an interprofessional (interdisciplinary) team-based approach to primary care; reality is that in the face of shifting and mounting interprofessional expectations, providers remain challenged by competing demands such as healthcare physician shortages and provider burnout (Glenn, 2012). Pressures related to daily challenges in practice such as time constraints, distractions and difficult patient cases contribute to barriers in the development of mindful skillsets and the utilization of such skills in the practical clinical setting. Program leaders, administrators and trainees all question how to hold steadfast to the conversations and possible solutions of health care provider burnout; attributed to by ever-increasing professional demands. Presenting this topic as a training element to change management leaders and curricular team specialists evoked both the interest and support of the program to move forward in introducing a mindfulness curriculum and training to the PCE program and its trainees. The introduction of a mindfulness training course as component of the PCE program aiming to address issues of burnout through the professional formation of compassion, workplace satisfaction (stress-reduction) and mindfulness skillsets.

Many leaders have questioned if there is a viable means to addressing the issues of burnout amongst trainees and faculty. Meetings with PCE program directors and leadership in the fall of 2015 resulted in heightened interest and regard to the concept of mindfulness being included in the medical education curriculum as a possible method addressing the issues with burnout and patient care. At Annual Office of National Office of Academic Affiliations-Centers of Excellence national meeting in April of 2016, national program directors and leaders openly presented the issue and question of means to addressing trainee and faculty burnout; reiterating the notion that there is a need for innovative training opportunities to assist in addressing mindfulness and burnout needs.

This medical education Mindfulness curriculum was developed through a process of systemic and appreciative inquiry. Examination of the PCE program curricular structure lead to the acknowledgement of re-occurring conversations

related to health care provider shortages, increasing training demands along with increasing levels of stress and burnout. As a result, attention was brought to the fact that there were gaps in training explicitly aimed at addressing and counter-reacting issues related to stress, burnout and decreased levels professional satisfaction. Mindfulness, as a growing trend in counter-reacting many issues of stress and burnout, had not been identified or introduced to the PCE program. Training elements and topics on the subject of mindfulness within the PCE program were scanty established and not introduced as part of the formal PCE curriculum. Over the course of developing the mindfulness program through systemic inquiry, PCE program leaders and curricular managers contended that elements of mindfulness were presented in segments of the PCE hidden curriculum. Hidden curriculum is described as a curriculum by which some of the outcomes are learned, yet not openly intended (Martin, 1983). While a hidden curriculum may have some benefit, it is difficult to learn and understand what it not openly and explicitly taught. After a significant deal of systemic and appreciative inquiry, the PCE program agreed to an explicitly taught mindfulness training program.

Aligning with seminal research which suggests that mindfulness reduces psychological distress and burnout (wellness), increases primary care providers' capacity in relating to patients (compassion) and provides the opportunity for meaningful reflective practices; referencing study by Goodman and Schorling (2012) as an example of a similar mindfulness course and study is cited. Goodman and Schorling's abstract aimed to determine if a continuing education course based on mindfulness-based stress reduction could decrease burnout and improve mental well-being among healthcare providers from different professions. The pre-post, observational, longitudinal study was conducted at a university medical center with a total of 93 health care providers from the MD, NP, PsyD and SW professions. Utilizing the Maslach Burnout Inventory (MBI) and Self-Perceived mental/physical well-being measured by the SF-12v2 tools. At the conclusion of the 8-week study, both MBI (emotional exhaustion, depersonalization, and personal accomplishment) self-reported measures improved by significant p-value scores (see Figure A4 for outcomes of the study). There were no significant changes in the SF12v2 physical health scores. Similar to the study conducted by Goodman and Schorling, and through investigations of other seminal research conducted at similar sites of medical education, the PCE desires to provide its interprofessional trainees with explicit learning opportunities, training and tools in mindfulness. The adult learning design guide of Analysis-Design-Development-Implementation-Evaluation (ADDIE) steps were used as a guide throughout the development of this structured curriculum.

Curricular Design & Implementation

In February of 2017, the session was delivered to a cohort of twenty-five interprofessional graduate medical education trainees. This cohort was comprised of (10) medical resident trainees, (3) psychology fellow trainees, (4) nurse practitioner student trainees, (4) nurse practitioner resident trainees, (1) social work student trainee and (2) pharmacy fellow trainees. Session faculty included a mindfulness subject matter expert training administrator and wellness facilitator with a background in licensed social work and yoga services. Through a structured series of session logistics, didactics, activities and interactive segments; session key learning objectives permitted session participants to discuss views concerning mindfulness curriculum as part of medical education programs, engage in 1.0 interactive contact hours of mindfulness/wellness training, and leave the session having gained an understanding of mindfulness techniques and how to readily apply them.

RESULTS

Session feedback report yielded score averages of 4.79/5.00 under the category of 'average learning rating overall for session/content', 4.62/5.00 under the category of 'average learning rating of session/content usefulness' and 4.48/5.00 under the category of 'average learner rating of increase in confidence [as a result of the session]'. Trainees expressed the desire to include more of [these types of] mindfulness sessions in medical education curricula and in piqued interest in receiving more mindfulness resources for themselves and incorporation of mindfulness into their patient care practices.

CONCLUDING REMARKS

Since the implementation of the Mindfulness session, session faculty were invited back in May of 2017 to present this talk in the form of a faculty development series 1.0 hour talk, which yielded high engagement and verbal expressions satisfaction and interest in the topics of wellness and mindfulness in professional practice. In March of 2017 the health

psychology resident trainee cohort effectively launched a mindfulness series for Cleveland PCE patients which provided an open drop-in platform to address stress, anxiety, chronic pain and mindfulness approaches to health care. Agency health care trainees, providers and faculty have expressed an increased interest in topics of mindfulness, with interests in formally structuring additional agency-wide mindfulness in places of need.

This project has added richness to conversations and outlook concerning burnout and the utilization of mindfulness training programs in the medical education sector. Time, space and resource allocations are a historical issue in the field of health care. As history shifts again, now grappling issues of provider shortages and patient case influxes; shifts in the approaches to how health care providers think about how to train providers and how to care for the increasing needs of their patients must also occur. Mindfulness training as part of medical education does not proclaim to remedy all of the issues of stress, burnout or the various degrees of systemic issues that affect the field of healthcare. Rather, the purpose of this program is a response to a call for assistance, in acknowledgement that there is an issue of burnout at hand. Under the specialization of educational leadership and management with a focus on curricular development; this project has expanded the pedagogical approach to the management of adult learning, training and curricular design. Careful consideration of the elements of andragogy, social capital (workplace) learning and somatic learning has afforded a contemporary approach to learning and teaching innovative topics in adult education.

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Technology In Medical Education: Telehealth, Data Mining And Population Management

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ABSTRACT

The U.S. Department of Veterans Health Affairs (VHA) is an Accountable Healthcare Agency (ACO), declaring itself responsible for the health outcomes of populations within a system of healthcare delivery. The VHA offers telehealth (a term often used interchangeably with the term telemedicine; but referred to as telehealth within the VHA system) as a means to providing quality care to patients challenged by time, space, geographical and other issues presenting a barrier in the accessibility to quality healthcare resources. VHA Telehealth Services uses health informatics, disease management and telehealth technologies to target care and case management to improve access to care, improving the health of veterans. Telehealth changes the location where health care services are routinely provided. The value VA derives from telehealth is not in implementing telehealth technologies alone, but how VA uses health informatics, disease management and telehealth technologies to target care/case management thereby facilitating access to care and improving the health of veterans.

The Office of Telehealth and Department of Healthcare Technology services collaborate with the academic medicine education/training programs and faculty education/training programs in an effort to expand knowledge pertaining to best practices in telehealth care and management services available to health care providers and their patients. In addition to formal didactic and workplace practicum, the telehealth training programs integrate data mining techniques under the conceptual and practical framework of population management (also referred to as panel management).

Keywords: Telehealth, Data Mining, Technology, Healthcare, Medical Education, Population Management, Panel Management

Acclimating Adjunct Faculty For Success In Academe

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ABSTRACT

Colleges and universities hire adjunct faculty to fill in the gaps not met by full-time faculty. Academic leaders should find ways to ensure the success of this vitally important faculty group. This qualitative research inquiry studied adjunct faculty acclimation in institutions of higher education. Using a phenomenological approach, researchers studied how nine adjunct faculty at universities and community colleges adjusted to working in academe. This study was undergirded by two theories, organizational socialization and structural empowerment. Four themes emerged from this study: teaching experience, syllabus development, preparation for non-academic responsibilities, and departmental and organizational support. The research team recommends the following practices to acclimate adjunct faculty for success: implement standardized adjunct faculty onboarding, provide access to professional development for adjunct faculty, create an adjunct faculty toolkit, and provide a clear path for adjunct faculty evaluation.

Keywords: Adjunct Faculty, Promising Practices, Organizational Socialization, Structural Empowerment

INTRODUCTION

Adjunct faculty, also known as “contingent faculty”, play a critical role in higher education and the delivery of instruction. Data compiled by the American Association of University Professors (AAUP) reports that more than 70 percent of total instructional staff appointments in American higher education today is comprised of adjunct faculty (Monnier, 2017). Kirshstein (2015) further elaborates that in community colleges over 65 percent of instructional faculty are part time. With the significant presence of contingent faculty in higher education, it is important that systems and procedures be developed to assist contingent faculty in acclimating to higher education in instructor roles and engaging students in meaningful ways.

In reviewing how adjunct faculty are treated in higher education, Kirshstein (2015) studied the importance of time, space and institutional knowledge. Typically, adjunct faculty are not provided office space, have limited time due to other full-time work commitments and know little about institutional procedures that affect student advising, grading practices, scholarly and research requirements and institutional policies governing academic affairs. This lack of institutional knowledge makes working with students difficult and hinders the adjuncts’ ability to negotiate institutional systems. In surveys of part-time faculty, instructors themselves acknowledge that these factors limit ability to work with students effectively (Kirshstein (2015).

Consequently, contingent faculty face many challenges transitioning to higher education with limited knowledge of expectations and requirements. Adjunct faculty can benefit from onboarding experiences that address the broad range of acclimation concerns and organizational socialization needs. Strategic onboarding practices provide a method for institutions to address new faculty concerns in a humane and organized way and prepare adjunct faculty for the new world of higher education.

Contingent faculty enter into academic environments where there are expectations for academic advising, committee work, professional development, governance participation, scholarship, and research productivity. Orientation and onboarding processes could include exposure to these academic expectations and provide opportunities for new faculty to experience what this looks like and how it is to be measured in the new context. It

would be helpful in developing the professional growth plan if specific exemplars for first year faculty were identified and discussed. In addition to compliance issues, faculty vitality commands center stage in an onboarding process in academia. Given the critical role of adjunct faculty in higher education, assuring faculty academic well-being is in the organization's best interests.

THEORETICAL FRAMEWORK

The theoretical foundation that supports this qualitative investigation is provided by theories of organizational socialization (Tierney, 1997), and structural empowerment (Kanter, 1993). Tierney's theory of organizational socialization in higher education indicates that faculty success is directly related to cultural socialization with the university (1997). Tierney used a holistic approach to discuss socialization and begins with an examination of organizational culture where vision and goals are reviewed (Tierney, 1997). It is theorized that faculty are most likely able to effectively acclimate in an environment where congruency exists between goals and culture of the faculty and the university. Tierney (1997) asserted that the faculty landscape is grounded in socialization and culture.

Tierney (1997) suggests that a critical framework for understanding the importance of acclimating new faculty in higher education embraces the notion of organizational socialization in higher education. Organizational socialization involves institutional pathways created to help new employees understand the values, culture and norms of the receiving institution. This socialization process is ongoing, rather than static and has as its focus helping the new employee develop interpretive understanding of the new place, practices and protocols.

Tierney (1997) further posits that the success of new employees is directly correlated to how they are initiated and oriented into the new organization. Tierney concludes that the extent to which new faculty understand organizational norms and mores, the better he/she will fit into the organization. Higher education institutions can impact this process by thoughtfully developing orientations, mentorships and induction programs that help new faculty transition into academic teaching roles.

In short, organizational culture points faculty to what they need to know and do in order to survive and thrive in the institution (Johnson, 2004). University leaders learn best about socialization from new faculty. New faculty have fresh insight to onboarding and acquisition of learned norms, and are able to provide new thoughts to enhance the socialization experience (Johnson, 2004; Tierney & Rhoads, 1993). Faculty who experience a thorough socialization are more likely to remain employed and successful at the institution.

In addition, this study is also undergirded by Kanter's theory on structural empowerment (1993). Kanter posited that an employee's work environment can either limit or inspire optimal job performance. The theory on structural empowerment indicates that employees are empowered by having access to information, support from managers and peers, resources to get the job completed, and opportunities for professional development (Laschinger et al, 2001, 2004). Kanter asserts that when these constructs are not present, employees are not empowered.

Structural empowerment is the responsibility of the organization (Kanter, 1993). Leaders in organizations are encouraged to cultivate work environments where information, support, resources, and opportunities are widely available. When leaders spend time ensuring employees feel empowered using the concepts of information, support, resources, and opportunities, then employees demonstrate organizational commitment. This organizational commitment leads employees to retain employment and have increased job satisfaction, and decreased job stress and burnout (Laschinger, Wong, & Grau, 2013).

PROBLEM BACKGROUND

Adjunct faculty represent a growing presence in higher education, yet, the needs of this group of faculty are not understood as institutions seek to staff classes. Contingent faculty are temporary hires put in place to address growing enrollments and declining full time faculty resources. Kezar and Maxey (2013) report that adjunct faculty are treated differently from hiring requirements to professional resources provided. There is little expectation that adjunct faculty will meaningfully engage in the academic life of the institution including shared governance, participate in student life, or find time to produce research and contribute to the profession. Adjunct faculty are not less capable, it

is just that less is expected of them in the organizational growth of the institution. Goral (2014) concluded that contingent faculty were never designed to be the largest segment of faculty in higher education, yet, the current reality is that today contingent faculty represent the majority in many four-year schools and most commonly in community colleges. Goral describes this situation as the unintended consequence of over utilizing part-time faculty employees.

Adjunct faculty are essential to the teaching and learning process in post-secondary education. Adjuncts are heavily utilized, especially at community colleges and in professional programs. As institutions are faced with economic and enrollment challenges, examination of the role of adjuncts in the professoriate is warranted (Stenerson, Blanchard, Fassiotto, Hernandez, and Muth, 2010). With tough economic times and competition increasing from “for-profit” institutions, many fear that the role of the traditional full-time faculty member is diminishing and the role of adjuncts will increase (Stenerson et al., 2010). As such, higher education institutions may need to invest more time and funding to acclimating adjunct faculty (Fusch, 2012).

BUILDING THE ADJUNCT BRIDGE TO ACADEMIC PRACTICE

Varney and Ader-Beeler (2014) of Southern New Hampshire University identified five challenges involved in preparing adjunct faculty for academe: (1) Providing consistency in student learning experience (2) Consistency of grading (3) Having key performance indicators (4) Measuring faculty performance and (5) academic administration, i.e. scaling measuring, monitoring and coaching. For those institutions that are student-centered, consistency in the student experience is an academic priority. Adjunct faculty would benefit from faculty discussions about what is valued in the student experience and how students are supported in their learning. The many resources on campus devoted to student learning support should be identified and shared. Adjunct faculty need to know the academic goals of the instructional unit, the program and course outcomes and the measures for success in each.

METHODOLOGY

To address the research question regarding contingent faculty acclimation for success, the researchers employed a qualitative research design with a phenomenological approach. Husserl (1963), as noted in Moustakas (1994) noted reflection that occurs through the phenomenological approach provides a logical and systematic resource for completing analysis and synthesis necessary to arrive at the essential description of the experience. The textural description includes thoughts, feelings and ideas that portray the richness of the experience (Patton, 2015). The research team determined that the most effective manner by which to understand acclimation of adjunct instructors was to explore their lived experience with the phenomenon.

The authors used purposive sampling (Patton, 2015) to identify adjunct faculty in higher education to participate in the study. Nine contingent faculty participated in the study: five newly appointed adjunct instructors at a public university in the Midwest, and four adjunct instructors recently assigned to teach at a satellite campus of a community college in the Mid-Atlantic region of the United States.

The research team triangulated data collection using two online questionnaires: one for contingent instructors at the university, and another for adjunct instructors at the community college. Each questionnaire included objective open-ended questions pertaining to preparation, challenges, expectations, and levels of satisfaction of contingent faculty in higher education.

After participants returned responses to the questionnaire, the investigative team used the narrative analysis tools of Survey Monkey to complete the open coding process to determine general concepts resident in participant responses. After open coding and sorting were completed, researchers turned to axial coding and meta-coding to uncover emerging themes (Bernard, Wutich, & Ryan, 2017). Emergent themes are discussed in the following section.

RESULTS

Based on the analysis of responses from the five university contingent faculty and the four community college adjunct instructors, four themes emerged: 1) teaching experience, 2) syllabus development, 3) preparation for non-academic responsibilities, and 4) departmental and organizational support. The themes are discussed below.

Teaching Experience

The university and community college instructors all reported outside employment from teaching positions at their respective schools. A number of these faculty are involved in entrepreneurial pursuits, as well as management careers, and administration in K-12 and post-secondary settings. As such, most respondents had limited experience with classroom teaching and practical pedagogical methods.

When asked the question “How aware are you of the academic expectations for adjunct faculty?” Sixty percent of the university instructors responded being moderately aware of expectations regarding instruction. The remaining 40% responded that they were slightly aware of academic expectations. One participant added, “even though I have taught in the K-12 setting, I am not sure that it will actually help me to teach college students.” University participants mentioned that a faculty handbook and access to a mentor would be helpful with understanding academic expectations related to classroom teaching.

Responding to a similar question regarding years of experience in teaching, 50% of the community college faculty reported having 1 to 3 years of college teaching experience, and 25% of community college respondents have less than one year of teaching experience. The community college instructors, however, noted that professional development opportunities were available to learn strategies for teaching. Seventy-five percent of the community college participants asserted receiving adequate training and professional development to meet the academic requirements of the position. Additionally, community college instructors reported being assigned a “shadow” or mentor who would be available for advisement in instructional matters. The subtext of responses for both university and community college informants contained a strong implication of the desire for assistance with pedagogy and content delivery.

Syllabus Development

Unlike the secondary school setting where lesson plans are required on a weekly basis, faculty in higher education are required to create and develop a course syllabus that drives instruction for an entire semester. One respondent at the community college stated, “That means that I have to think forward through the entire semester before I even teach the first class. That is a little overwhelming.” The syllabus is the guiding document for any course; and as such, every instructor must develop one. Rubin (1985), as cited by Duquesne University, holds educators must not assume that students explicitly understand reasons for taking a given class, how the class relates to the college curriculum, or what the requirements of the class mean. Because of this deficit, instructors must carefully outline those issues in the syllabus, along with listing the course assignments and activities.

The university respondents felt a slight or moderate proficiency in developing a course syllabus (60% moderately proficient; 20% slightly proficient). Only 20% felt extremely proficient in syllabus development. Those educators relied on syllabi utilized in graduate classes. Participants reported that these syllabi represented exemplary models to follow for developing a syllabus for any assigned classes.

Of community college instructors, 66% of respondents purported having a slight proficiency in syllabus development and 33% felt somewhat proficient. None of the faculty reported having expert knowledge of syllabus development. However, these educators alluded to the fact that help with syllabus development is one of the functions fulfilled by assigned mentors.

Overall, university and community college instructors understood the importance of the course syllabus, but community college faculty have assistance available, while it appears that university faculty may not have ready access to complete the syllabus development task.

Preparation for Non-Academic Responsibilities

Contingent faculty in both university and community college settings are assigned responsibilities outside of the purview of the classroom. Working on committees, advising students, and traveling to different campuses (if the institution has multiple locations) are among some of the common non-academic responsibilities required of adjunct

faculty members. A department chair or a dean often assigns these tasks as a part of duties associated with the teaching assignment.

When asked about preparation for non-academic responsibilities, 40% of the university adjuncts who participated in the study reported feeling very well prepared, and 40% felt adequately prepared. However, it was noted that these faculty members did not identify what types of non-academic responsibilities would be assigned. Twenty percent of the university respondents cited feeling slightly prepared. Advising is one of the non-academic tasks assigned to faculty. Of the university informants, 80% cited feelings of extreme competence, and 20 % faculty reported feeling moderately competent. One university participant shared, “I understand to a degree what advising entails, but without clear knowledge of the programs in which students are enrolled, I may be at a disadvantage when trying to advise them. So I feel confident in my ability; I’m just not confident that I will that the right information to advise them wisely.”

Community college participants returned similar responses. 75% of the community college adjuncts expressed feeling well prepared to address non-academic issues associated with teaching. One respondent elaborated, explaining how the onboarding process was instrumental in his becoming comfortable with additional tasks. The participant shared, “When I was hired, I had to complete set of online onboarding tasks. They dealt with campus safety, organizations, computer security, among other things. I met with the department chair shortly after that to clarify my concerns.” This participant surmised that the online component, along with the face-to-face support was the reason he felt prepared. It was noted that community college participants were not required to provide academic advising at their institution or to work on committees, but they are encouraged to do so. Even so, 25% purported feeling only slightly prepared for other non-academic responsibilities.

In terms of preparing contingent faculty, it appears that university adjunct faculty may need to be more diligent in seeking out specific information in order to complete non-academic tasks more efficiently, as resources may not be immediately accessible. On the other hand, there is an indication that community college adjuncts may have more readily available assistance with ancillary responsibilities.

Departmental and Organizational Support

One open-ended question on each questionnaire addressed the issue of institutional support directly. All participants agreed that each institution provided technology support. All shared that “tech” support was adequate and easily accessible at all times, whether it was in person or online, so no concerns were discussed in that area.

The university participants returned answers related to departmental and organizational support that were unique to each individual. One informant stated, “An adjunct faculty handbook, if one exists, would be helpful. Also, any information relative to job expectations and requirements...would allow me to be proactively prepared.” Another participant felt access to the library would be a welcomed support. Yet, another respondent asserted that “mentorship and consistent communication from the department” would be critical to success. All participants reported having had a positive initial interaction with department and university leaders, but also expressed a desire for continued support and relationship building.

Conversely, the community college faculty felt supported by respective departments and the college in general. One community college participant stated, “I have been receiving support from the start in every aspect.” Another said, “The support I have received so far has been fantastic! I’ve felt like a part of the college since Day 1.” One respondent talked about a leadership enrichment program instituted by the president of the college that is open for full time faculty and staff, as well as adjunct faculty. Another participant shared that her department chair had nominated her to do a presentation at a regional conference based on a successful classroom strategy. While one participant mentioned professional development as a concern, each of the community college instructors stated that support has been constant, and that each has been made to feel like “one of the family” in the respective institutions.

Overall, contingent faculty at university and community college settings experience some commonalities in terms of broad thematic concepts. It appears that adjuncts at the university level may be somewhat challenged in being

able to have immediate access to instructional, non-instructional, and departmental support. Conversely, community college adjunct faculty seem to have more accessible preparation and support.

CONCLUSIONS

Findings of this study allowed investigators the ability to align outcomes with the research. Study participants discussed acclimation to higher educational institution in the context of four themes: 1) teaching experience, 2) syllabus development, 3) preparation for non-academic responsibilities, and 4) developmental and organizational support. These themes are aligned with researcher recommendations for best practices to support adjunct faculty (Lyons and Burnstad, 2007). Best practices for supporting adjunct faculty include: 1) a thorough orientation to the institution, its culture and practices, 2) adequate training in fundamental teaching and classroom management skills, 3) both initial and ongoing professional development, 4) a sense of belonging to the institution, and 5) recognition for quality work that is perceived as appropriate and adequate (Lyons and Burnstad, 2007). Coburn-Collins (2014) indicated that these constructs allow institutions to have adjunct faculty who feel important and are likely to retain employment and make continued meaningful contributions to the student learning environment.

Teaching Experience

Study participants wanted to be effective teachers and needed help with how to teach and delivering content to students. Coburn-Collins (2014), using the best practice of providing adequate training for adjunct faculty, discussed creating faculty workshops that teach faculty how to manage classrooms, and student activities like mind-mapping, and service learning. This type of class is also aligned with the theory structural empowerment (Kanter, 1993) because the workshop provides a resource that enables faculty to become independent contributors. The workshop is also associated with the theory of organizational socialization (Tierney, 1997), which declared that new employees retain employment in the organization when induction programs that help employees understand their jobs. The best practice of, recognition for quality work that is perceived as appropriate and adequate (Lyons and Burnstad, 2007), identifies that adjunct faculty need to feel respected and supported. Therefore, when adjunct faculty attend workshops focusing on classroom management and teaching, it shows that the institution has an investment in adjunct faculty accomplishments and contributions to the institutions.

Syllabus Development

In the two groups studied, university and community college faculty, both groups had different views of syllabus development. The majority of university faculty felt moderately proficient in syllabus development, because of exposure to exemplar syllabus in graduate school. University faculty used graduate school faculty as unofficial mentors and as models for syllabus development.

However, community college faculty only had a slight proficiency in syllabus development. While they were only slightly proficient, the community college faculty also noted that assistance with syllabus development was one of the jobs of the official faculty mentor. This unofficial mentor fulfills the best practice, initial and ongoing professional development (Lyons and Burnstad, 2007). Coburn-Collins (2014) realized that a formal mentoring program provided adjunct faculty with the tools for success by engaging in one-on-one assistance with a more experienced faculty member. Both organizational socialization (Johnson, 2004; Tierney, 1997) and the theory of structural empowerment (Kanter, 1993), describe employees knowing what to do to be successful as a key to organizational commitment.

Preparation for Non-Academic Responsibilities

University and community college adjunct faculty felt well-prepared for non-academic roles. University adjunct faculty desired a thorough understanding of students, and educational programs as a way to be an effective student advisor. Community college adjunct faculty did not have a requirement to advise students, but had other non-academic responsibilities, for which they felt prepared. Community college adjunct were prepared for this role due to the robust onboarding system provided by the institution. The need of university faculty and the preparation of community college faculty are found in the best practice, a thorough orientation to the institution, its culture and its practice (Lyons

and Burnstad, 2007). Coburn-Collins (2014) asserted that adjunct faculty needed continued orientation and support. Orientation programs allow adjunct faculty to ask questions, and become familiar with university expectations. Tierney (1997) affirmed that faculty achieve organizational fit when an orientation program that prepares faculty for success is instituted. Coburn-Collins (2014) asserted that orientation programs promote faculty preparation and effectiveness.

Departmental and Organizational Support

Adjunct faculty discussed needs of support within the department and in the broader context of the institution itself. University adjunct faculty discussed needing access to resources such as a handbook and the library. Community college faculty felt supported, and felt fully embraced by the institution. Faculty need support to successfully navigate the institutions. Adjunct faculty need access to the faculty handbook, library, technology, and need to know where to go to receive assistance. All of these are included associated with structural empowerment theory (1993). Employees who have access to information and resources are empowered to be successful on the job (Kanter, 1993).

Community college faculty also indicated the need for professional development. Kanter (1993) indicates that opportunities for professional development as one of the criteria of the structural empowerment theory. The faculty groups discussed professional development and mentoring as being germane to the institution and not an afterthought. Therefore, it is concluded that professional development should be a normal activity and included in the institution's culture.

Coburn-Collins (2014) discussed creation of an Office of Adjunct Faculty Support Programs, and Policies and Procedures for Adjunct Faculty Employment, within the context of the best practice, recognition for quality work that is perceived as appropriate and adequate. These two institutional practices created codified methods of support for adjunct faculty. Additionally, Lyons and Burnstad (2007) indicated that adjunct faculty needed to feel supported as important parts of the instructional delivery system of the institution. Coburn-Collins (2014) emphasized that this occurs through providing collaborative spaces for adjunct faculty to work, formal workshops, and mentoring. These practices are found throughout the best practices for adjunct faculty as identified by Lyons and Burnstad (2007).

RECOMMENDATIONS

The research team recommends the following promising practices for higher education leaders to orient adjunct faculty to the institution:

Implement Standardized Adjunct Faculty Onboarding

Adjunct faculty want to feel like solid contributors to the fabric of colleges and universities. Institutions should develop and implement a robust system of adjunct faculty onboarding. Chiefly, the purpose of the onboarding process is to introduce faculty to the culture and norms of the institution. This should include information on institutional, college, and departmental goals. The onboarding process should allow faculty the opportunity to discuss individual goals with the department chair or program manager to ensure goal alignment.

Provide Access to Professional Development for Adjunct Faculty

Contingent faculty, want to grow and develop. It is the responsibility of the institution to provide access to professional development in order to retain adjunct faculty. Professional development for adjunct faculty should be individually tailored to each faculty member. Some faculty may need a structured class, while others may desire an informal mentoring relationship with a senior faculty member. Access to professional development is an investment in adjunct faculty on behalf of the institution.

Create an Adjunct Faculty Toolkit

Since adjunct faculty are not at the institution as much as full-time faculty, it would serve the institution well to ensure adjunct faculty have resources readily available. The adjunct faculty toolkit can be an online resource that contains instructions for accessing the library, job aids for technology use, syllabi outlines, and lists of frequently asked questions, and frequently called numbers.

Provide a Clear Path to Adjunct Faculty Evaluation

At Boise State University the commitment to adjunct faculty evaluation is explicitly stated “Formative and summative feedback (feedback both for the purpose of teaching improvement and for making personnel decisions) is important for the success of Adjunct faculty” (Boise State University, 2013). Goals and expectations that are clearly stated and explained. Help guide performance. If adjunct faculty continuation or reappointment is based on performance and student evaluations, then the drivers of the evaluation process should be included in the onboarding process.

SUMMARY

This study utilized a qualitative approach to explore adjunct faculty acclimation into institutions of higher education. A total of nine adjunct faculty who work in either a university in the Midwest or a community college in the Mid-Atlantic were studied. The study raised four emergent themes of adjunct faculty acclimation. These themes include: teaching experience, syllabus development, preparation for non-academic responsibilities, and departmental and organizational support. Lastly, researchers recommend three promising practices to acclimate adjunct faculty: implement standardized adjunct faculty onboarding, provide access to professional development for adjunct faculty, and create an adjunct faculty toolkit.

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Impact Factor And Scholarly Research: The Traditional Media With A Social Media Influence

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ABSTRACT

The research method for this project – examining the dissemination of research artifacts through social media as well as the impact social media can have on scholarly research – originated with Brent Bowen of Embry-Riddle Aeronautical University (ERAU) at the Prescott, Arizona campus and Dean E. Headley of Wichita State University. Bowen and Headley introduced the Airline Quality Rating (AQR) in early 1993 as an objective method for comparing and scoring airline performance in areas deemed to be important for consumers. Scores are calculated by defining 15-elements in four major areas, focusing on airline performance and the significance of the factors to consumers of air travel in a given calendar year. The report is a summary and evaluation of month-by-month ratings for U.S. airlines, based on domestic performance data which these companies are required to publish. The general case study focus of this research is the AQR as it relates to the news of the AQR's release as disseminated through social media platforms, the subsequent utilization of and references to the research by social media users, and the global reach of social media. Social media metrics are examined on the basis of traditional news releases. These news releases, when amplified by social media platforms, assist in broadening the viewership and the utilization of research. The AQR's Visibility Reports evaluate four aspects of online traffic - Total Pickup, Traffic Flow, Audience, and Engagement. In discussing how the AQR has helped to facilitate a worldwide discussion on U.S. airlines and domestic air travel.

Keywords: scholarly research, social media, Airline Quality Rating, AQR, metrics

In this article, we examine how social media platforms facilitate research utilization, reaching audience members on an international scale, and increasing the visibility of given research. Since 1993, the Airline Quality Rating (AQR) has been considered a credible information source, ranking airlines' performance using a quantitative method based on 15 elements from four main focus areas. Utilizing years of consecutive data, the AQR has gained audience viewers through several social platforms by using press releases and new broadcasts, and by incorporating newer social media platforms and tools. The AQR's Visibility Reports give the most useful data by providing a detailed breakdown of the report's four categories - Total Pickup, Traffic Flow, Potential Audience members, and Engagement. Each category is broken down further, detailing the sources from which the data is drawn. This includes such new media as Facebook, Instagram, and Twitter, which are managed by ERAU's marketing team.

The AQR also utilizes news broadcasts, which formally announce the AQR's release on TV before a live press audience. These press releases provide immediate feedback on the AQR. Traditional methods of releasing information to users, like using the news media broadcasts, remain one of the most effective means of reaching a global audience.

Scholarly Commons, an online data base of the AQR, is ERAU's open-access institutional repository, and it allows free access of its content for internet users. Among other things, Scholarly Commons features the scholarly activity by Embry-Riddle faculty, students, and staff. Pertaining to the AQR, the repository provides monthly reports for the authors of scholarly works. These reports contain data regarding how, where, when, and by whom particular works

are used. Details include the industry researching the report, the geographic area of the download point, and the source through which the user downloaded the AQR.

This annual collaboration between ERAU and Wichita State University continues to increase its reach by expanding outreach to new audience members. In creating the AQR, these two universities have created an increasingly trustworthy airline evaluation tool based on decades of reliable public data.

In conclusion, the AQR has served as a key example of how vast a publication's reach can be (or can become using social media). Current metrics show that the 2016 AQR has reached a total of 1.29 billion viewers in over 1,043 print and online venues, stemming from news broadcasts, which aid in the dissemination of the research. Such news broadcasts come from companies that include Yahoo! News, ABC, CBNC, and TIME magazine. It should be noted that the release of the AQR generated approximately 12 million dollars in advertisement value for these companies. This outreach benefits researchers by increasing online visibility of the specific report on a global scale, and it also helps raise public awareness to the overall research topic.

VISIBILITY REPORT

Our metrics are drawn from social platforms and press releases in an effort to gain qualitative and quantitative information about the Airline Quality Rating (AQR). The AQR's Visibility Report examines the data points from social media accounts and press releases, examining and evaluating the data in the report's four elements – Total Pickup, Traffic Flow, Audience, and Engagement.

Total Pickup

The first element - "Pickup" or "Total Pickup" - represents the relevancy to media's placement and influencers' interactions with and about research content. Pickup also includes the Twitter engagement about news releases. Here, exact matches and tweets are key pieces of data. Exact matches are based on press releases published online with full-text postings monitored by PR Newswire and Embry-Riddle Aeronautical University, and which are found using algorithms created for tracking Embry-Riddle's international reach. Twitter users generate tweets by tweeting (posting) or retweeting content. These tweet and retweets are subsequently tracked by the PR Newswire. For the "2015 Airline Performance Improves Slightly" (Press Club, 2015c, Bowen, 2016a), there were a total of 196 exact matches. The potential global audience for this number of exact matches was estimated to have been 12.4 million viewers who either downloaded or read the year's AQR on or near the April 4, 2016 press release date. Figure 1.0 below, from the homepage of the Total Pickup section, offers a visual breakdown of the relationship between the media outlet used and the industries included in the calculation.

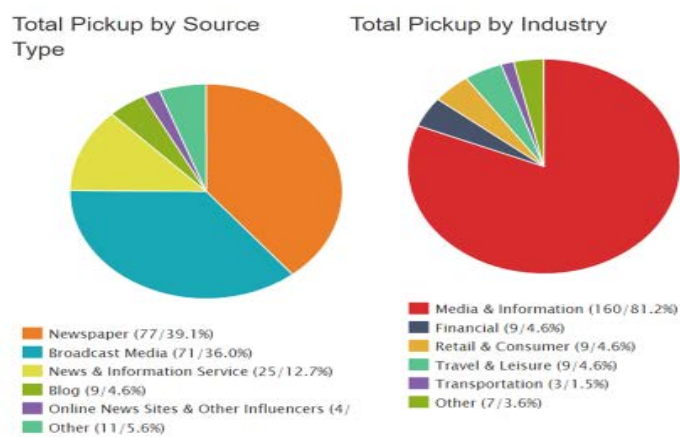


Figure 1.0 Media Breakdown

This section examines various media outlets, from old to new, emphasizing social media platforms that market to all generations. As per Figure 1.0 above newspapers, media broadcasts, blogs, and trade publications are used to illustrate a publication's reach for targeting these multi-generational audiences. Total Pickup by Industry examines information by sector yielding a different perspective on how the AQR is used. PR Newswire traces the data back to discover what companies were interested in the AQR press release.

Traffic Flow

Traffic Flow is an efficient technique for tracking the multiple publications scholars publish, and it is often used to determine which research is gaining the most attention. The AQR uses four broad Traffic Flow categories to collect view statistics. - Web Crawler Hits, Network, Websites, and Mobile Websites. Results were gained by tracking social media posts, with each post containing direct links to news publications, the AQR website, or to another site for downloading the document. The traffic flow data for the "2015 Airline Performance Improves Slightly" release indicated that the report had 267 views and 3,268 web crawler hits across the internet. From four search engines, a total of 73 web sources had 40 hits by web crawlers, which used one or more of the keywords listed in Figure 1.1. Search engines like Google give searchers, or marketing coordinators, the chance to purchase advertising. For Google, this means the ability to purchase Google AdWords. Similar advertisements are also available for Bing, another popular search engine. Figure 1.1 below shows some of the combinations of keywords used to find the AQR on particular search engines.

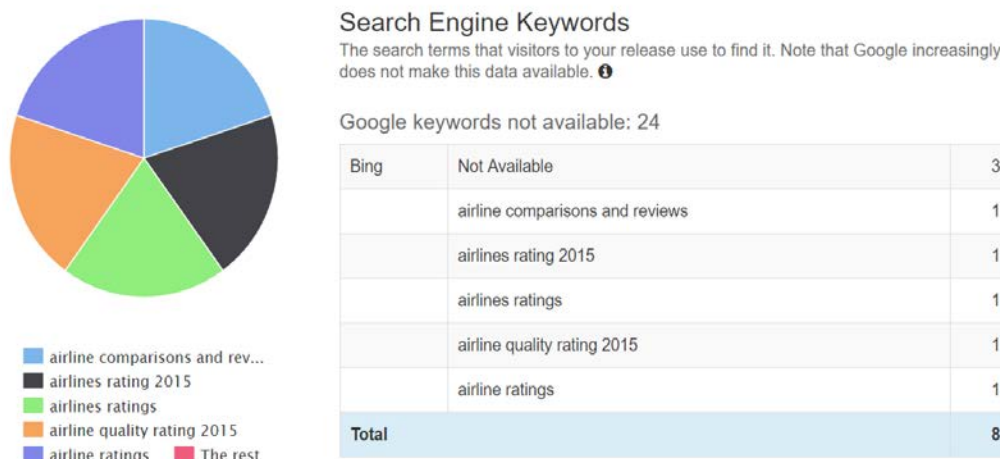


Figure 1.1 Search Engine Keywords

Audience

In analyzing Traffic Pickup, the process is broken down further by identifying the audience or users by industry, media types, and geographic region/country. For the media release of the "2015 Airline Performance Improve Slightly," the top industries examining the AQR had a concentration, or interest, in travel and transportation. These industries were followed by industries focusing on technology, consumer products, and media. All industries were graded on a scale from zero to one hundred twenty-five, roughly giving the number of individuals who downloaded the report or blogged about the research by industry. Figure 1.2 provides the interest in which an industry was more attracted to the research.

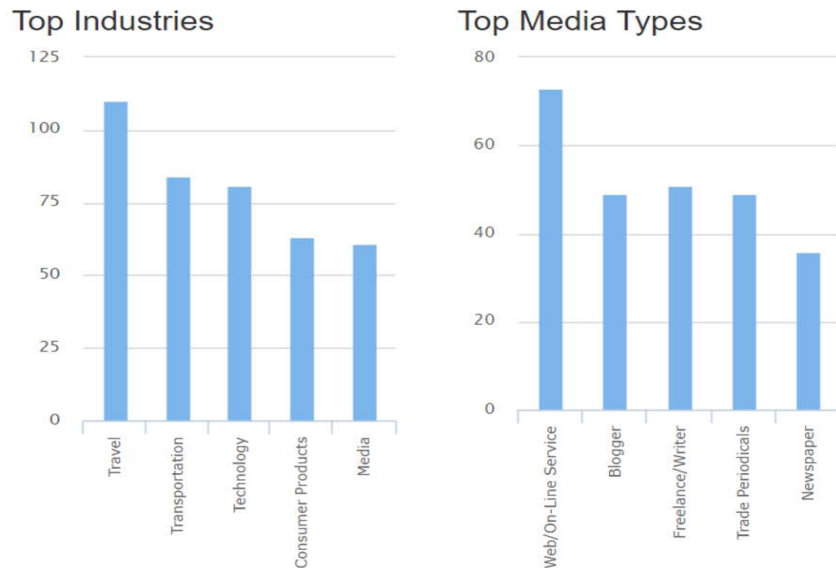


Figure 1.2 Media Demographics

Examining the rest of Figure 1.2 Top Media Types displays data from Web/On-line Services, Bloggers, Freelance/Writers, Trade Periodicals, and Newspapers. These are sources, or online tools, members of the public use to spread the word about the report. On the metrics, the scale for Top Media Types goes from zero to eighty. Web/On-line Service comes in with the highest score, and numbers dwindle for the remaining categories.

In addition to the breakdown of data by industry and media type, geographic location by country is also useful. Figure 1.3 below shows the global concentrations of research downloads by country. It should be noted that the AQR rates only domestic airlines and flights within the United States. Airlines like United Airlines or American Airlines (large companies in the U.S. aviation market) fly internationally, but those routes are not included in the AQR. Given this, it is not surprising that the United States has a greater number of views for the AQR because the document itself directly relates to the evaluation of domestic airlines.

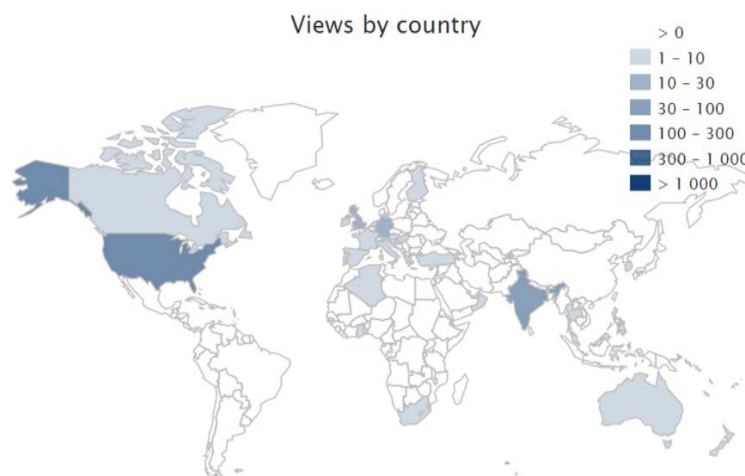


Figure 1.3 Global Scale

Visibility Report Overview

The Visibility Report incorporates these four categories into an overall report that gives users greater insight into the public's participation in the reading of or sharing the AQR across the world. The Total Pickup category yields information about users' interactions about the research with the longitudinal increase in numbers being of interest. The Traffic Flow category involves the way members of the public find the research through social media, news articles, personal blogs, and search engines by tracking users' engagement. The Audience category examines media demographics by industry, media type, and geographic area/country. Together these data provide the quantitative data to compare 2015 with other years. Figure 1.4 below is an image of the homepage for the "AQR 2015 Airline Performance Improves Slightly; Virgin America Narrowly Retains Top Spot" webpage.

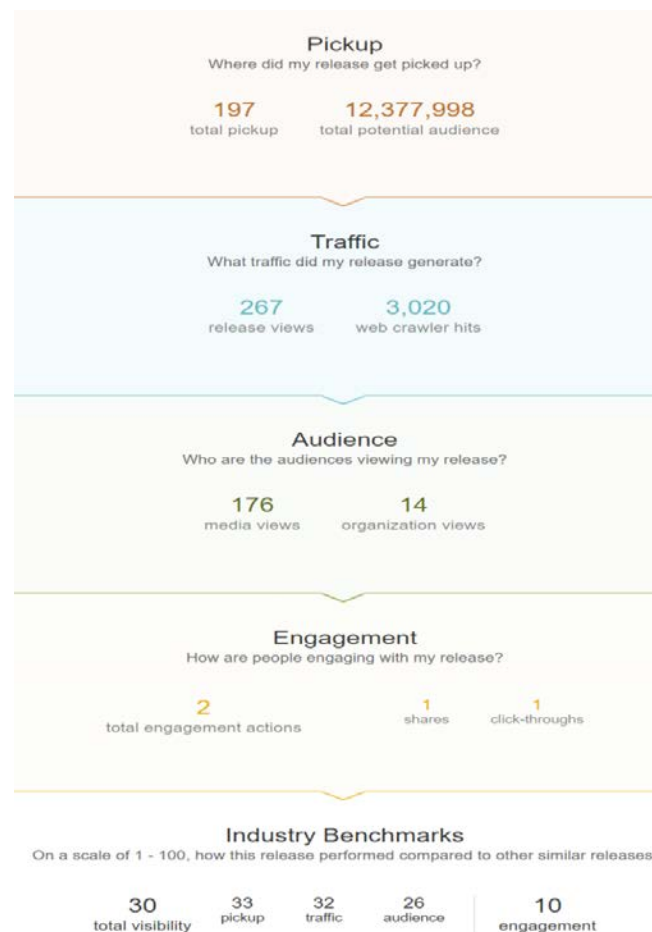


Figure 1.4 Visual Report Overview

Business Outcomes

Today's virtual world has transitioned from the static digital tools of Web 1.0 to the interactive digital environments (aka social media) of Web 2.0. In this new environment, social media gives content creators the ability to track the online activity of users, thus gaining direct and immediate feedback on the content posted. In the case of the AQR, this report accumulates such data from several in-house social media platforms hosted by Embry-Riddle's marketing team, and from the AQR's Twitter page. The data points presented in Figure 2.0 below are all metrics from Embry-Riddle's marketing team as of April 3rd 2016 release of the AQR.

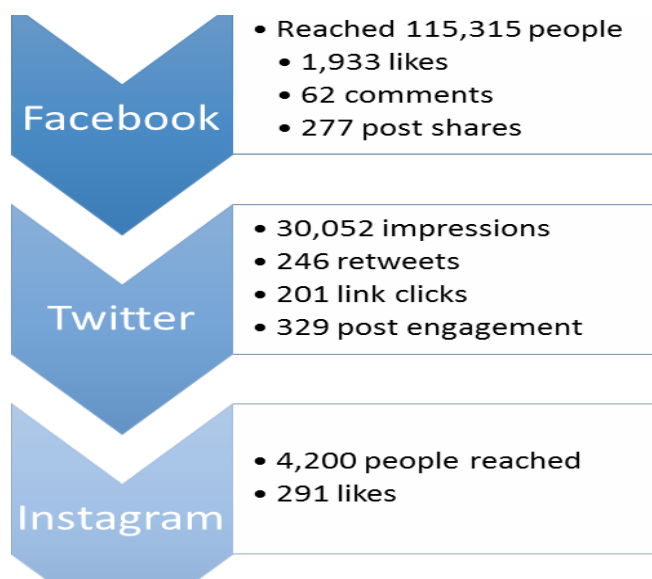


Figure 2.0 Social Media Platforms

Embry Riddle's marketing team uses the university Facebook page for disseminating campus news on social media, and the Embry-Riddle Prescott Campus community works to create the content there. In this regard, the marketing team uses Facebook to spread news of the AQR's release as part of this outreach effort. For 2016 alone, news of the AQR's April 3rd release on Embry-Riddle's Facebook page reached over 115,300 people. The initial post resulted in 1,933 individual likes (which include reactions in Facebook's newest version) and 62 subsequent comments. After the initial post on Embry-Riddle's Facebook page, followers responded by posting news of the AQR's release on their homepages 277 times. This type of research dissemination represents an additional way to increase resource visibility online.

Twitter is another popular social media platform. While tweets, or messages on Twitter, are limited to 144 characters, account holders can post URLs in tweets to direct followers to other sites for further information. Embry-Riddle's marketing team manages the AQR Twitter account and all the tweets posted (aka Embry-Riddle's Twitter feed). This Twitter feed has yielded a total of 30,052 impressions, 246 retweets, 201 link clicks, and 329 post engagements for 2016. To elaborate, an "impression" is the post delivered to other followers' Twitter feeds. Out of the 30,052 impressions, 246 followers retweeted the post on their own pages.

While Facebook and Twitter are both social networking tools, and interactive platforms, they complement one another in the context of metrics data. Facebook and Twitter users tend to be from different demographics (e.g., age, race, sex, gender, etc.), and the differences provide valuable insights into just who is accessing, using, and sharing the AQR.

Instagram is an additional social network for those with an artistic style. Instagram merges much of what Facebook and Twitter do separately, but it does so visually. With the AQR, Instagram posts were infographics for this reason. The AQR infographic reached 4,200 people through Instagram, with 291 likes from 3,733 followers of the Instagram page for Embry-Riddle's Prescott campus. Figure 2.1 below is an image of the AQR 2016 Instagram infographic. (Jameson, 2016b)

TOP AIRLINES



Figure 2.1 2016 AQR Infographic

In summary, the 2016 AQR directly reached an estimated 1.1 million people, and yielded an estimated 3.2 million subsequent impressions, with 59 comments and 2,274 likes. Of those social media users, 48% were male, and 52% were female. Geographically, the top countries accessing or following the AQR were Argentina, Turkey, France, El Salvador, the United States, Germany, United Kingdom, Chile, and Ireland. While social media users in the United States represented the majority of online activity pertaining the AQR, the activity of social media users in other countries directed toward the report show the global reach of the technology.

Conclusion and Future Study

In this article, we studied social media and the dissemination and utilization of scholarly research through some of its tools/platforms. We used several social networking platforms (e.g., Facebook, Twitter, and Instagram) to increase the online visibility of scholarly research (in this case the AQR) through the use of press releases and news broadcasts. The AQR's Visibility Reports yielded the most detailed breakdown of this data by allowing us to examine Total Pickup, Traffic Flow, Potential Audience members, and Engagement.

The availability of longitudinal data for the AQR has been especially useful in the creation of a trustworthy tool for public use. Given existent data dating back to 1991, scholars at Embry-Riddle Aeronautical University in Prescott,

Arizona, and Wichita State University have been able to create a valuable resource for evaluating domestic air travel in the United States.

Future research will involve increasing the number of social media tools and platforms under consideration in order to obtain a more in-depth view of how social media users use scholarly research and further disseminate it via the same or other social media tools. Our ultimate goal is to create a template for measuring social media impact on the dissemination and utilization of scholarly research across all disciplines.

CONCLUSION

In conclusion, the AQR has served as a primary example for showing the vast reach of social media platforms. Current metrics show that the AQR 2016 reached 1.29 billion viewers through 1,043 print and online outlets using news broadcasts as a way to announce the publication of the research. Such news broadcasts came from companies that include Yahoo! News, ABC, CBNC, and TIME magazine. We estimate that this level of online visibility for official release of the AQR generated approximately 12 million dollars in advertisement value for these companies. For those responsible for the AQR (and similarly with other scholarly works), this increased online visibility benefited these researchers, first by increasing the number of overall users/viewers who see the work and also by increasing the diversity of places where the work is accessed, expanding to a global scale.

Next Steps

Future research will involve increasing the number of social media tools and platforms under consideration in order to obtain a more in-depth view of how social media users use scholarly research and further disseminate it via the same or other social media tools. Facebook, Twitter, and Instagram offer quality insights into social media events (e.g., sharing, liking, etc.), but they are far from the only social media tools available. We intend to increase the number and types of tools and platforms in our future evaluations to include Mendeley, ResearchGate, Academia.edu, and/or Impactstory, among others. Our ultimate goal will be to create a template for measuring social media impact on the dissemination and utilization of scholarly research across all disciplines.

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Differentiating The Business Model And Attaining Success, A Case Study Of Singapore Airlines' Strategies

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ABSTRACT

Singapore Airlines is among the top ten commercial airlines worldwide for international passengers carried, and is renowned for its customer service and differentiated product. In a region highly competitive and sought out by many other air carriers, Singapore Airlines has remained efficient and profitable despite global financial troubles. This paper examines Singapore Airlines' marketing and operational strategies and how it earned a reputation as one of the most successful airlines in the world. The paper also discusses how Singapore Airlines made the difference through its customer focused strategy, which led it to become one of the top airlines in Asia Pacific region and globally. Singapore Airlines' Strengths, Weaknesses, Opportunities, and Threats (SWOT) are analyzed, and best practices discussed. A review of the commercial aviation industry challenges and Singapore Airlines' approaches against them further elaborates on how the company has remained competitive in the dynamic environment.

INTRODUCTION

Singapore Airlines popularly referred to as "SIA" is one of the world's most successful airlines in terms of service and profitability. It is viewed as one of the top airlines both by the customers and the competitors at the global level (Chan, 2000). SIA flies in 30 countries on five continents to 62 destinations and provides high-quality service to the customers. SIA's core values, incorporated by effective management and internal training, such as uncompromising approach towards safety and security, ethical business practices, commitment to being a good corporate citizen and dedication to profitable returns to shareholders, played a significant role in its success. This paper discusses the background of the origin, growth and expansion of SIA; analyze how the marketing, operational, and management strategy adopted by SIA led to its stellar global reputation in the aviation industry.

RESEARCH METHOD

To identify and analyze Singapore Airline's business model, a Strengths Weaknesses Opportunities and Threats (SWOT) analysis is adopted in this research (Helms and Nixon, 2010). A SWOT analysis, or matrix, is a structured planning method that evaluates those four elements of an organization, project, or business venture (Humphrey, 2005). It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving the objective. 'Strengths' are characteristics of the business or project that give it an advantage over others, 'Weaknesses' place the business or project at a disadvantage relative to others, 'Opportunities' are elements in the environment that the business or project could exploit to its advantage, and lastly, 'Threats' are elements in the environment that could cause trouble for the business or project (Humphrey, 2005). The strengths are discussed in 'Analysis of Singapore Airline's Success Strategy,' opportunities in 'Singapore Airline's Approach Towards the Challenges,' and the weakness and threats in the 'Industrial Analysis and Challenges.'

Origin of Singapore Airlines

In 1947, Singapore Airlines began as Malayan Airways Limited (MAL) with the scheduled services between Singapore, Kuala Lumpur, and other parts of Malaysia including Ipoh and Penang. In 1955, it began its international service. In 1963, the name of the airline was changed, from Malayan Airways to Malaysian Airways and was controlled jointly by the government of Malaysia and Singapore. Singapore separated from the federation in 1966 and the airline was renamed as Malaysia-Singapore Airlines Ltd (MSA). In 1971, MSA reorganized into two different entities: Malaysia Airline System and Singapore Airlines (Chan, 2000). In 1972, SIA listed as a public limited company with a limited liability through Temasek Holdings Ltd and was owned by the Singapore Government. SIA Shares are predominantly owned by three major companies. 55% of holdings are owned by Temasek, 15.7 % by DBX Nominees Pte Ltd, and 6.75 % by HSBC (Singapore Airlines Summary Financial Statement 2006-2007).

Passenger movements have grown from 8.1 million in 1981 to 55.4 million in 2015, and air freight movements have increased from 193,000 tons to 1.85 million tons, respectively. In 1981, SIA connected 67 cities in 43 countries, and in 2015 increased to more than 320 cities and 80 countries with over 6800 scheduled weekly flights.

Analysis of Singapore Airlines' Success Strategy

In the competitive aviation industry, SIA has earned a renowned reputation over the past four decades. SIA has won the "World's Best Airline" award 21 out of 22 times and the Skytrax's "Airline of the Year" award three times (Heracleous and Wirtz, 2010). The predominant reason for SIA's success is its ability to deliver service excellence in a cost-effective way.

Marketing and Branding Strategy

SIA used a different marketing strategy in branding itself. Being an Asian airline, it focused on Asian traditions to provide gentle and well-mannered service. The iconic 'Singapore Girl' image took the pride in branding, becoming the frontline behind its success. SIA recruited flight attendants with Eurasian ethnic backgrounds, were dressed in a traditional Malay *sarong kebaya*, and trained to represent the core values of the airline through their excellent customer service. They were trained rigorously to provide premium quality service and maintain the value of 'Singapore Girl' image through customer orientation. SIA also provides attitudinal programs, language courses, and training to ensure the professional service. The 'Singapore Girl' image progressively became more popular, and began to attract global customers. The image of the 'Singapore Girl' representing beauty, prestige and customer service (Chan, 2000) became of the most successful advertising campaigns from 1970 to 2013 (Wang, 2016).

Innovation and Service Strategy

SIA has been known for its service excellence as a trendsetter in the aviation industry. In 1970, SIA was the first airline to offer free headsets, a choice of meals, and free drinks in Economy class. In 1984, SIA was also the first to fly non-stop between London and Singapore, and in 1989, between Hong Kong and San Francisco. SIA was first to introduce the satellite-based in-flight telephones in 1991 and introduced KrisWorld in-flight entertainment and communications system in 1995. In 1998, it involved a board of internationally renowned chefs to develop in-flight meals. In 1999, it introduced the Dolby Surround System to in-flight movies and in 2001, it offered AVOD capabilities (Audio and Video On Demand) on KrisWorld. In 2004, it marked a new milestone in aviation history by operating the World's longest non-stop commercial flight on the A340-500 between Singapore and Los Angeles and then from Singapore to New York. In 2004, SIA introduced BerlitzA World Traveller interactive language learning program on all A340-500 aircraft Public Affairs Department Singapore Airlines Ltd (2009).

Networking and Modernization Strategy

With regard to the global network, SIA's route extends across 98 destinations in 40 countries including the routes served by SIA, SIA Cargo and its subsidiary airline. As a part of globalization in 2000, SIA joined the Star Alliance network in order to continue its service worldwide. SIA upgrades its fleet regularly to emphasize its commitment to service excellence and expansion by placing new orders. During the last few years, it has placed orders for a wide

range of new generation aircraft such as Airbus 380-800 (19 in fleet, 5 on order), Airbus 350-XWB-900 (11 in fleet, 56 on order), Boeing 777-300 (Extended range; 27 in fleet) and SIA was the first airline to fly the superjumbo A380-800 aircraft in 2007. SIA has one of the youngest fleets of any major airline with an average age of 6 years and 1 month as of 2009. Its cargo division operates a fleet of seven B747-400 Freighters, and its subsidiary SilkAir operates ten Airbus A320-200, three Airbus A319-100s, 17 Boeing 737-800 (with 6 on order, and 31 Boeing 737 Max 8's on order. Today SIA's fleet is comprised of A380-800, A340-500, A340-300, A330-300, B747-400, B777-300, B777-300ERs, B777-200 and B777-200ERs (Public Affairs Department Singapore Airlines Ltd, 2009).

Human Resource Strategy

SIA's HR strategy consists of five important elements, which along with the leadership played a prominent role in its ability to deliver the best business strategy of service and excellence in a cost-effective way. It is also known as SIA's "Leadership for Service Excellence" model (Wirtz, Heracleous and Pangarkar, 2008):

- a) Stringent selection and recruitment processes
- b) Extensive training and retraining of employees
- c) Formation of successful service delivery teams
- d) Empowerment of front-line staff
- e) Motivation of employees

HR strategy begins with recruitment, which is extremely rigorous and strict. Out of 18,000 applications received annually, only 10% are hired. After initial training, candidates are monitored for six months; 75 % receive an initial five-year contract, and 20% get an extension of the probation period. This strict selection process ensures the merit of the candidates (Heracleous, Wirtz and Johnston 2004). SIA invests a substantial amount into its four-month intensive program known to be the most comprehensive in the aviation industry.

SIA also adopted a learning and development job rotation strategy among the departments that allows the staff to get an in-depth understanding of the operations in other areas, which reduces interdepartmental conflicts and paves way for innovation. Additionally, SIA believes building team spirit results in higher achievements. Its 6,600 crewmembers are divided into different teams and each team has 13 members that fly together as often as possible. SIA believes this will help the team members to understand each other's capabilities and personalities, as well as provide a sense of belonging (Wirtz, Heracleous and Pangarkar, 2008). Team leaders evaluate staff performance and provide suggestions to improve the crew. In addition to providing feedback, team leads, if required, recommend the staffs for retraining.

The last element in HR strategy is the motivation of workforce. Although the annual salary is lower than industry standard, SIA offers up to 50% of the annual salary as bonuses (Heracleous, Wirtz and Pangarkar, 2009). SIA offers performance-based share options and significant variable pay components that are linked to individual contributions by employees.

Management Strategy

There are different groups of people at SIA who vary from each other based on culture, nationality, knowledge, skills and this difference might easily bring conflict in the working environment. Organizational culture must be effective in each hierarchy to handle a large number of employees from different backgrounds. Leadership strategy plays an important role in bringing success to the company by maximizing the capability of the employees within the organization. This is only possible if a learning culture exists within the organization. Learning culture improves people's comprehension of other segments of business and reduces the lack of understanding of various functions.

Organizational Culture. Barney (1986) states that organizational culture (values, beliefs, languages, and different ideas) are complex and create diversity in an organization. This is an important variable because it brings either success or failure to the organization (Pillania, 2003). Organizational culture plays a significant role in SIA as the workforce is composed of a variety of different nationalities, and SIA prioritizes strategies to harmonize the team. The level of culture may be either visual such as dress code, slogans, logo, objects or exposed value i.e.; however, the way people in an organization represent the goal is through perceptions, thoughts, and feelings (Schein, 1990). Based on Schein's

model, SIA adopted three levels of culture such as using the “Singapore Girl” icon, dress code, and their slogan “A Great Way to Fly” to create an identity and also represent the high customer’s expectation in service quality. SIA’s business philosophy and the organizational goal is that every employee needs to provide the highest quality of service. This value is engrained in new employees during the training and contributes to the organizational success of the company.

Leadership Strategy. Weiss (2002) suggested that empowerment could create creativity among the people because everyone can progress in their skills. SIA adopted this empowerment strategy within its organization, as customer satisfaction and high service quality are its objectives. SIA has a streamline system of communication that maintains transparency between departments. This plays a major role in reducing the lack of understanding within the organization. First, SIA provides a clear objective and expectation to its employees, and then frequently communicates it to make it clear. Secondly, the leaders encourage and support the employees by providing resources and advice as needed. SIA also provides freedom and autonomy to the employees to make decisions in abnormal circumstances to settle the problem. This flat organizational structure helps the employees make decisions on a case-by-case basis and prioritizing customer satisfaction. Additionally, SIA invests in professional development by rotating vital employees around different functions of the company.

Learning Culture. Levitt and March (1988) define organizational learning as “encoding result from the past into routines that influence behavior.” Knowledge management is important in the organization’s success and survival in the competitive business market as it encourages innovation and acumen, leading to improved organizational performance. The two categories of knowledge that exist within knowledge management in organizations are explicit knowledge and tacit knowledge (Nonaka, 1991). SIA has rigorous training and retraining for its employees. It has a job rotation program, and this process contributed to increased value and potential for employees, while providing benefits to the organization simultaneously (adopted from Edwards, 2005); Job rotation helped the key staff at SIA to become more knowledgeable of in every part of the business. This provides job enrichment and leadership opportunities, resulting in a challenged and trained workforce. This organizational structure at SIA provided job satisfaction and helped to obtain augmented efficiency from its employees.

INDUSTRIAL ANALYSIS AND THE CHALLENGES

Threat Due to New Entrants

Due to the deregulation act and free trade agreements between countries, there are more opportunities in the Asia Pacific region. New companies have formed to provide the Low-Cost Carrier (LCC) service around the Asian region and currently, there are more than 60 LCC’s offering both short and long-distance flights. For instance, Air Asia introduced the budget flight Air Asia X in 2007 which offered service from Malaysia to London, Australia, and India (Kent, 2007). Though it is not a direct competition to SIA currently, there are chances in the near future for this LCC to venture into the premium market sector. Apart from the LCC’s, the other major competitors of SIA are the Gulf carriers such as Qatar Airways and Emirates, both of which are continuously expanding their service to Singapore. They are also increasing the share of Singapore-Europe market. Qatar Airways is introducing three daily flights and Emirates has introduced five daily flights on the Dubai-Singapore route. Etihad Airways has also progressively added to the Singapore-Middle East capacity in 2015 (CAPA, 2015).

Bargaining Power of Suppliers

Two manufacturers dominate the commercial aviation industry: Boeing and Airbus. This puts limitations on where SIA can choose to purchase aircraft for its fleet. SIA has been continuously renewing its fleet even during the economic crisis which helped the manufacturers to overcome the difficulty (Calingo, 1997). SIA is Boeing’s largest customer on 777 series and the first customer of the Airbus 380. This makes SIA an important customer to the aircraft manufacturers and as a result, enjoy the high bargaining power over them.

The Threat from Substitutes

As inflation remains, budget or even full-service air ticket prices are relatively stable; this translates as a relatively cheaper source of transportation besides other modes, e.g. bullet trains in other jurisdictions (Calingo, 1997).

Competitive Rivalry

The low-cost airlines like Malaysia Airlines, Qantas Airways, Air Asia, and Jet Star Airways are gaining market share more easily. The competition within the airline industry is considered fierce, and the strong bargaining power of customers alongside the growth of low-cost airlines causes serious threats to SIA.

SINGAPORE AIRLINE'S APPROACH TOWARDS THE CHALLENGES

Subsidiaries

The competition is stronger in the aviation industry than in the past. This is mainly because of the LLC's such as Air Asia, Ryanair, Jet Star, Cathy Pacific, and Malaysian Airlines. SIA responded to these challenges by investing in new technology to maintain the cost without compromising the service quality. Due to economic crises, customers leaned towards the LCC's. SIA entered this sector of the business by investing in its own budget carriers. Singapore Airlines Group fully owns and majority-owns airline subsidiaries including Silk Air (100%, since 1989); Singapore Airlines Cargo (100%, since 2001); Scoot (100%, since 2011) and Tiger Airways Holdings (56%, since 2014) (CAPA, nd).

Networking

SIA increased its network via code sharing with members of Star Alliance. Code sharing allows airlines to sell tickets on one another's flight and offer service to additional destinations.

Star Alliance. SIA has a marketing partnership with Lufthansa, United Airlines, and Thai Airways. This partnership allowed SIA to develop and improve the operations, facilities and new technologies. Most importantly, these legal agreements were designed to expand the business worldwide through marketing linkages without acquiring the substantial additional costs.

Cargo Alliance with Lufthansa. SIA partnered with Lufthansa Airlines for cargo service and this supported both the airlines to expand their market to areas where they did not have service previously.

CONCLUSION

In conclusion, SIA's prestigious brand name has given it the stature in comparison of other airlines, due to SIA's innovative internal and customer-facing business strategies. The airline developed best practices that kept them afloat during financial recessions, and it remains forward thinking through its continuous improvement efforts. In order to maintain a competitive edge in the airline business, SIA can implement the following strategies:

Cost Leadership Strategy

It is usually used by the companies for generating profit by decreasing the price and retaining the old customers and attracting new customers. Based on this strategy SIA has to take an initiative to reduce the prices and should make sure to provide the full facility. By implementing this strategy SIA can get more profit and it will always be ahead of other airlines and all the passengers ranging from Business class to Economy class.

Differentiation Strategy

According to this strategy, a company has to provide a service which the customer will perceive as different and will be ready for paying more for that. SIA must continue its innovative strategy in all the aspects such as technology, entertainment features etc.

Target Market Expansion

SIA is known for its high-quality service excellence. It has to maintain that while attracting customers who travel by LCC. In order to do this, SIA can extend its service quality across all its subsidiaries such as Tiger Airways, SilkAir and Scoot. In addition, it should continue exploring other forms of partnerships and maintain the Star Alliance.

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Emotional Intelligence's And Psychological Well-Being's Influence On GPA Of Online University Students

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ABSTRACT

Having accreditation from regional accreditation organizations is of high concern for universities because of the need for some to receive direct federal funding, for all universities receiving federal funds for student loans, as well as applicant interest in attending universities with accreditation. A major criterion for accreditation by all regional accreditation organizations is that organizations have a high student achievement as reflected by a high grade-point average (GPA). If there are factors associated with higher levels of GPA, universities may be able to integrate those factors into learning activities and assessments within student course development.

Research studies have shown that there is a correlation between EQ and PWB (Augusto-Landa, Pulido-Martos, & Lopez-Zafra, 2011). Individuals with high EQ experience greater PWB than those with low EQ (Brackett, Rivers, & Salovey, 2011). But can this correlation be extended to an influence on GPA was the central question of this study. The aim of this quantitative correlational-comparative research study was to investigate the concepts of EQ and PWB influence on GPA. The study was conducted with 254 online psychology university students at a university in Southern California.

This research project focused on two theoretical areas: the ability model of EQ i2.0 (Mayer & Salovey, 1997) and a multi-faceted PWB model (Ryff & Keyes, 1995). The definition of EQ by Mayer and Salovey (1997 page number) is “emotional intelligence is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions in a positive manner that leads to self-acceptance, self-confidence and overall satisfaction with life.” A primary foundation of this study is that the components of EQ are abilities that a person can increase through attention to acquiring knowledge leading towards gains in positive beliefs and actions. Research indicates that individuals have the capacity to increase their EQ through optimism, meditation, unconscious emotional regulation and perspective-taking (Sharma, 2011).

The second foundational theory of this study is the multi-faceted PWB. According to Ryff and Keyes (1995), PWB encompasses the following elements: self-acceptance or positive attitude toward oneself, personal growth or development, purpose of life, control or mastery of the environment, positive relationships with others, and autonomy or ability to be independent. These positive elements help to bring balance into lives that promote the PWB of individuals and ability to combat the negative facets of life. PWB encompasses good health, social skills, and loving relationships with family and friends, and success in a career (Montes-Berges, & Augusto-Landa, 2014). Today, the widespread epidemic of depression and anxiety are threatening societies across the nations. Many people are unable to cope with the obstacles and challenges that life throws at them. This inability to cope has negatively impacted their overall health and PWB. The study of PWB in the field of positive psychology as an approach to happiness as developed by Ryff and Keyes (1995) is critical due in part to the lack of studies examining the predictors.

Results indicate a high correlation between EQ and PWB as reported by online psychology university students. In addition, findings show that students with varying levels of EQ and PWB had corresponding GPA levels with high EQ and high PWB showing the highest GPA and low EQ and low PWB showing the lower GPA. For university administrators to raise GPA, one way may be to incorporate into curriculum components knowledge associated with abilities within EQ. Those abilities have been shown to have a positive effect on careers, leadership, and life. Additionally, integrating the knowledge to increase the factors of PWB into curriculum together with teaching ability

changes for an increased EQ may lead to a student body better able to maintain balanced lives leading to positive social change. This integration may as well direct precede an improved university-wide GPA.

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Using Electronic Methods To Assess High Level Concepts And Skills

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ABSTRACT

This paper describes how electronic testing platforms such as Blackboard and Google Classroom can be used to assess upper level concept understanding related to project and problem based teaching. Strategies for electronic test development will be identified, particularly how to create questions that require students to evaluate and synthesize information to justify choices or to describe project outcomes. The paper discusses the advantages and disadvantages of electronic testing and identifies strategies to overcome common pitfalls.

Using Electronic Methods To Assess High Level Concepts And Skills

Several electronic testing platforms are currently available to teachers to assist with student assessment. Most electronic platforms offer traditional testing format of multiple choice, true, false, fill-in-the-blank, short answer, and paragraph. However, it is up to the teacher to craft the test questions to assess whether or not the students have achieved the course learning objectives. Although teachers ideally want to assess higher levels of understanding such as problem solving and critical thinking, the electronic testing platform may seem limiting. For example, multiple choice questions commonly address basic recall, requiring students to identify, select, or match. Many teachers believe that short answer and paragraph options are a better choice to assess a student thought process. Several researchers have looked at how the format of a test impacts the analysis of critical thinking and have reached different conclusions. According to Norris (2017) these conflicting conclusions indicate a need for further research.

It is possible that the teacher's ability to craft and assess questions and prompts can impact the success of higher-order thinking assessment. For example, the teacher might ask students to respond to an electronic prompt and explain results of a projects' process and analysis or justify a student determined outcome, such as a solution to a problem. These types of short answer and paragraph formats are not easily evaluated electronically. Student responses require close examination by the teacher, often with reference to a teacher designed rubric. One might argue that the electronic formats can be programmed to search student paragraphs, identify key words, and score them correctly. However, students could use key words in the wrong context negating the accuracy of the text results.

Assessment of project and problem based instruction requires the teacher to craft test questions and prompts that address a range of content, knowledge, and cognitive skills. This paper will focus on strategies to develop electronic assessments for the higher order thinking skills related to project and problem based instruction.

When a teacher creates assessments for project or problem based learning, the tests must differentiate between the student's abilities to perform at the varying levels of taxonomy. Project and problem based experiences require students to go beyond basic application of knowledge and skill. Students must combine knowledge for use in a new way and gain insight from inquiry, experimentation, critical analysis, and reflection. This process is often linked to critical thinking. Norris and Ennis, (1989) described critical thinking as the process used to make reasonable decisions on to what to do or believe. They defined the main attributes of critical thinking as reasonable thinking, reflective thinking, focused thinking, deciding what to believe or do, and abilities and dispositions. Peck (2016) defined critical thinking as "reflective skepticism" which does not occur in isolation, but is linked to areas of expertise and knowledge. With that in mind, the example and strategies in this paper are generalized and easily adapted to various subjects.

It can be difficult to assess student's ability to innovate, see things in different way, or propose a viable solution to a complex problem. The skills indicative of these abilities can be assessed with the creative use of electronic formats.

For example, scenario type assessments can be created which will require students to analyze and reflect on a situation, based on their knowledge and experience with project or problem based learning. Students could be asked to select the “best” next step or action, such as gather additional information, research potential problems and global impacts, perform tests, or compare and contrast data. Scenarios can be used to pose meaningful and relevant situations that challenge students to consider assumptions, apply if-then reasoning, and brainstorm possible solutions and alternatives. For example, students can describe or identify which part of the scenario is most credible, and explain why. Students can choose from a list or provide short answer options to identify or describe a logical conclusion or solution. Another angle to assess critical thinking is to ask students to pose an argument or alternative to a situation or stance. Students can also be asked to list evidence that would be needed to contradict a conclusion.

When assessing a project or problem based experience the teacher might ask students to write about connection they discovered between their hypothesis and the outcome. Another example could be to compare the project process and outcome to the plan for the project; how well the project followed the plan and how the plan impacted the outcome. Students can describe their disposition on importance of a viable and detailed plan to support a successful project outcome. Students could also be asked to describe problems encountered and how were they addressed. To test general critical analysis, thought provoking questions may be crafted in the format of multiple choice. For example:

Question 1: You are in the process of building a model of a balsa wood tower and you notice that it is not matching up with the drawing plan. Which of the following actions do you take?

- A. Throw the partially constructed tower away and start over.
- B. Continue with the tower, not following the plan, but make it the correct height.
- C. Be creative and continue building the tower without a plan.
- D. Deconstruct the tower back to the point where it matched the plan and rebuild.

A follow-up question can ask students to explain why they chose a particular action. The written justification will help the teacher assess the student’s thought process, and provide opportunity to explain considerations such as enhancing structural stability or the economic impact of saving time or materials. The justification paragraphs can be scored with a teacher developed rubric.

Question 2 example: You have completed your project and are conducting 3 identical tests to determine the project’s performance. You notice that the first two tests produced expected and similar results, but the third test results were significantly different. What would be your next step?

- A. Run the test three more times
- B. Use a different type of test
- C. Calculate the average performance based on the three tests
- D. Look for errors in the testing equipment or procedure

A follow-up question can ask students to explain why they chose that particular action. The purpose of such questions is to prompt students to think critically to inform and justify a decision. An advantage to electronic formats is the option to include images and video to boost questions to assess a higher level of cognition. For example, several multiple choice questions can be crafted to assess the student’s ability to analyze and reflect on information provided in a video and draw conclusions based on synthesis of knowledge. For example you might ask students to watch a video of a tree falling in the forest and have them look for clues to determine the most likely reason for the tree falling. You might ask questions that assess the species, age, or condition of the tree compared to the surrounding trees, or compare and contrast leaves, branches, trunk size, and bark. You might pose questions to determine if students observed weather, climate, or conditions of the soil such as puddles of standing water or accumulated moss. Students could be asked to make a list of questions that they would research prior to determining an exact cause. Several multiple choice questions or fill-in-the-blank questions could be based on a problem based video or image. The electronic platform would allow the video to be paused and repeated as needed. Another advantage of electronic testing is an entire class overview of question responses and the quick input of grades into a spreadsheet. The teacher also has the option to indicate the number of points and weight of each question. Tests within the electronic platforms can be constructed using the same font and size, which enhances clarity of student responses. When grading an essay

question the teacher also has the option to sort, view, and assess responses to the same prompt together, which speeds rubric scoring and improves teacher assessment reliability. Electronic formats allow the teacher to provide written feedback to students electronically and release grades at a desired time. If the teacher has a proven test, with specific answers and points established, there is the option to release grades to the students as soon as the test is completed.

CONCLUSION

Overall electronic assessments have some distinct advantages such as autocorrect and direct input into a spreadsheet. These features work best in multiple choice and fill-in-the-blank formats, whereas short answer and paragraph format may require teacher grading. Assessment of higher order thinking skills require a teacher to craft challenging and thought provoking questions which prompt students to analyze, synthesize, and reflect. Assessment of a students' ability to think critically might include drawing a conclusion based on the application of several principles or synthesis, the combining or forming of relationships to come up with a new idea. Another strategy is to pose open response questions where there could be several possible correct answers. Students can be asked to reflect on their project outcome, describe how to improve results, and explain what they would do differently if they were to start the project over. These types of questions can document the student's ability to problem-solve or learn from mistakes. Once the teacher has crafted and posed probing questions, the gathering of student responses is easy within an electronic platform. However, fair and valid assessment of written paragraphs, whether hand written or electronic, can be time consuming unless the teacher utilizes checklist, rubric, or Likert scale. Teachers can use these scales to help assess student's logic and ability to describe communicate in a clear, complete, thoughtful manner. As technology evolves, it is expected that electronic testing will improve and may offer more format options and ease the grading of student written responses.

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Does The Rhetorical Tone Content In An MD&A Adequately Consistent With Financial Performance?

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ABSTRACT

This work replicated a study of Sydserff and Weetman (2002) to investigate the congruence of rhetorical tone in MD&A sections with financial performance. To this end, the verbal tone measured by five thematic indicators offered by DICTION 7, named as: Activity, optimism, certainty, realism, and commonality while the firm's performance is measured by return on assets (hereafter ROA). The research tests its hypotheses by utilizing a balanced panel data sample from the 475 MD&A sections of 95 U.S. firms, all of which were listed in Fortune 500 in 2015. This sample is split into highest performance, which includes companies with performance greater than their industry's average, and lowest performance, which includes firms with performance lower than the industry's average. Specifically, the data collected spanned five years, from 2010 to 2014. The sample starts with 2010 as the author wished to neutralize the effect of the financial crisis on strategic communication in the annual reports. This neutralization is supported by evidence that the economic crisis caused a higher variety of reactions captured by more variation in narrative subject matters.

The results report that the use of activity, optimism, certainty, realism in communication is found to be affected by industry type. However, a Mann-Whitney test for difference of median indicates that one master variable (activity), and three individual variables (motion, present concern and rapport) are positively associated with firms' performance. A certain tone for activity is found in the highest performance which indicates a greater use of rhetoric in discussing a featuring movement, change, implementation of new ideas or avoidance of inertia when writing their MD&A section. This suggests that companies with the largest profit are trying to tell the truth since reporting change usually unfavorable disclosers.

Overall, I do not confident feel that this result has an adequate evidence that two groups (highest performance and lowest performance) significantly difference along rhetorical tone measured by five master variables. Therefore, it can be concluded that the management writers do create an MD&A as part of an annual routine just to satisfy the shareholders.

Keywords: Rhetorical tone, highest performance, lowest performance, MD&A, Diction

The Influence Of Students' Evaluation Toward Teachers' Instruction

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ABSTRACT

Evaluation of teaching effectiveness has been officially implemented in Taiwanese higher education since 2005. This study investigated The Influence of Students' Evaluation toward Teaching especially on EFL instructors' classroom instruction. The data for this quantitative study were collected by a 31-item survey questionnaires on a 5-point Likert scale for discovery the EFL instructors' background information and their perceptions toward SRI. Thirty-two qualified participants were selected from 5 universities in northern Taiwan. The results not only have implications for future studies but also provide educators with findings that are effective for improving teaching strategies and instructional design.

Keywords: student ratings of instruction, EFL, instruction

Are U.S. And Foreign-Owned Oil And Gas Extracting Firms? A Comparison Of Financial Capital Structure And Performance

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ABSTRACT

The purpose of this research is to determine whether the differences in U.S. public policy and those of the rest of the world are significantly reflected in the financial structures and performance within the global oil industry.

INTRODUCTION

During the past ten years, international oil and natural gas prices and the prices of refined petroleum products have experienced considerable volatility. While the predominant market forces are quite similar in today's integrated world energy market, public policies vary significantly among nations. Differences in domestic corporate taxation, investment regulations, accounting principles and environmental laws are likely to force companies to select alternative financial structures and thus impact firm specific operating and investment policies and performance. According to modern financial theory, firms with significant sales and income volatility should avoid the use of debt financing and limit the outflow of dividends to shareholders. The purpose of this research is to determine if the differences in U.S. public policy and those in the rest of the world are significant and can be identified in the financial structures within the global oil industry. Specifically, this research is to determine whether the U.S. oil extraction industry differs significantly from the other nations oil extraction industry based firms on capital structure policy, dividend policy, working capital management and systematic risk. Industry data were collected and a statistical analysis performed to test the hypothesis. Where differences are observed an explanation is offered and the difference's social impact is hypothesized.

COUNTRY DIFFERENCES

Due to dissimilar cultural, governmental and environmental policies in place in different countries, corporations most likely will exhibit dissimilar financial characteristics. These differences likely will manifest themselves in the capital structure, expenses, performance and dividend policies of the firms. The different policies are in several areas. The tax codes of the nation in which a company is chartered will certainly affect its operating characteristics and capital structure. For example, the depreciation of an investment may not be considered an ongoing expense in some countries or depreciation will be extended over a long-time period. Also important is the treatment of interest expenses. These are known to be different throughout the world. Another issue is the general accounting principles of the region in which the company operates. These can lead to different realizations of profits versus cash flow and can be important to dividend policies of various firms.

Outside of accounting and tax policies are the market regulation policies and cultural differences of the countries. Environmental regulations differ across countries and influence firm behavior. A country population's welcoming and supporting oil and gas exploration and production will create a favorable environment and attract investment.

As noted, corporations with highly volatile earnings should have less generous dividend policies. In nations where

the market is highly regulated, the earnings may be less volatile. Also, with consistent cash flow there will be more use of debt financing. Another policy issue is the extent to which the government is involved in the management of the company. Many foreign oil firms, while corporately held, are still under direct oversight of the national government where they are chartered. While these firms are gaining independence, it is still a current issue.

These factors are key in the corporate decision to determine a firm's capital structure and the management of its assets. Given that the oil and gas exploration companies are growing rapidly and many mergers and acquisitions have occurred, these lines may blur in the near future. For now, however, these differences may still be significant.

METHODOLOGY

The question to be resolved is can statistical analysis distinguish capital structure, dividend policy and economic performance differences between oil extracting firms of the United States and foreign owned firms? Regression analysis and tests of significance are used to exam the hypotheses.

Bridging The Gap Between Enhanced Scholarship Expectations And Practitioner Faculty Awareness Scholarship Mindset And History Of Scholarly Activity

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ABSTRACT

Historically many universities have utilized the practitioner faculty model leveraging practical professional experience over traditional academic research. Over the past year university accrediting bodies have tightened many aspects of faculty expectations including enhanced scholarship expectations. Revised regulatory requirements present a new scholarship expectation for all faculty with an emphasis on faculty that teach at the Masters Course level in all colleges. While each college may interpret and define the requirements differently, all faculty members need to engage in a scholarship plan meet new qualification requirements. This presents a gap between the current faculty situation (experience/interest/understanding) regarding scholarship and the current requirements for a significant number of existing faculty members. This research focuses on identifying and creating tools, training, and resource possibilities to bridge this gap in scholarship considerations. The research was conducted by members of the leadership team at the University of Phoenix. Yvonne Phelps, Vice President of Academic Affairs for Campus Services, Michelle Palaroan, Director of Academic Affairs at the Las Vegas campus, and Summer Van Pelt, Campus Director at the Bay Area campus, represent a variety of organizational perspectives on this faculty based topic.

The expected contribution is to create a platform to discuss faculty awareness of scholarship options and expectations, offer potential solutions to bridging faculty knowledge of scholarship, and identify ways to increase faculty confidence and motivation to encourage active engagement in scholarship activities. Along with the new sanctions imposed by accreditors, previous studies have indicated that within the role of faculty in schools, scholarship has become the most salient of their role (Green & Baskind, 2007). As an additional benefit of uncovering ways to encourage scholarship, faculty that are aware of and comfortable with scholarship add value to the student or society and students as a result of the scholarship activity (Dew, 2009).

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Country Agenda Undermined And Development Denied: Neoliberalism And The Imperialism Of Development Aid

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ABSTRACT

This exploratory article on aid complexities show that the serious economic dislocations and the universalism of the Global North culture. More importantly, this voice claim that aid programs have rather unsettled "One World Development" and accentuated imperialism. This paper points out that the problem is not so much that development failed, but that it was never really on the agenda in the first place, nor was it really a response to the problem of : "simultaneity." This study helps fill this gap in the literature and contributes insights that could improve the effectiveness of development cooperation.

The author argue that neoliberal's subtextually infantilizes aid recipients role and leaves no space for dialogism needed for own development or freedom in development. The reality that aid is a hollow hope to 'the rightization' of development informed the call for "Cross-Fertilization"-. The paper argues that the New imperialism'as constructed by neoliberals is about advancing the geostrategic interests and the projection of economic power by the Global North. It concludes that cross-Fertilization and power of society should be pressed into partnership to ensure development powered by the people: making them able to participate in the development of their needs and interests.. This is the path of "One World Development"

Inadequate Public Health Education In Support Of Diabetic Patients Residing In The State Of Florida

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ABSTRACT

The purpose of this study is to establish public health policies and procedures that are used to assist the needy in obtaining proper health care treatment despite their economic condition. Unfortunately, the needy are unable to afford adequate healthcare coverage due to the quality of life issues. The objective is to identify local counties within the State of Florida with high levels of reported diabetic patients of which most are unemployed. The findings will allow the respective the County's Public Health Department to focus their attention to residing citizens of the importance of public health issues for improving the quality of life.

Data Collection, Privacy Rights And Public Safety In The United States: An Unresolved Issue In A Growing Technological World

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ABSTRACT

This paper explores data privacy and corporate responsibility in an era of active and passive data collection by a variety of electronic devices. As the proliferation of devices continues, and the Internet of Things (IoT) broadens, this issue will continue to surface. The conversation about personal, corporate, and social responsibility as it relates to access of data by law enforcement that may provide information about criminal activity is continuing. At the core of this conversation is consideration of a “reasonable expectation of privacy.”

INTRODUCTION

Personal data is collected at an incredible rate by an ever-growing number of electronic devices. Consumers are trading their personal data for the sake of convenience or social interaction. These data collection devices are so pervasive, one wonders just how aware the general public is about data collected by these devices and how concerned they are about the use of their private data.

Personal computing devices like cell phones, smartphones, tablets and laptops capture personal data via voice, text, email, video, photo and application. These devices are not the only way data is collected about individuals. Surveillance cameras, traffic cameras, point of purchase systems, loyalty cards, and GPS locators in vehicles are just a few of the other ways data are being collected about people’s movements, purchases, and routines. The growing Internet of Things (IoT) provides additional devices for capturing private data about consumers. Household thermostats, refrigerators, lights, and televisions may be electronically controlled. Televisions may “learn” user preferences; refrigerators know if you need butter; and vehicles know that you typically drive home around 9:45pm on Tuesday nights. Your bank card knows how often you go to the ATM, where you are most likely to make your purchases, and where you went on vacation last March. Voice-activated devices like the Amazon Echo are always “listening” for the launch word, and consumers may not realize the incredible impact these devices, and others, have on data collection. Interestingly, it is not just the collection of the data that is concerning to some, but the storage of that data, access, and potential use of it.

Companies use data collected through their own devices to narrow their marketing efforts to those who most resemble targeted consumers or, in some cases, sell the data to other commercial enterprises looking for new customers. The terms of this data use are typically defined in a corporate privacy policy provided to consumers at various touchpoints. Most websites will provide home page links to privacy policies, and require consumer consent regarding use and resale of customer data during initial interactions. Many of these privacy policies are drafted by lawyers in language used to protect the company, and may be difficult for the average consumer to truly understand. Nonetheless, the policies exist and consumers are given the option to consent, or not, to the collection and use of their data.

Law enforcement has also emerged as a potential user of stored data collected through technological devices as evidence in criminal investigations. Although the data was certainly not collected or intended for this purpose, technological devices are actively, and sometimes passively collecting data about users. Law enforcement investigating potential criminal activity may seek access to these devices as part of an investigation. Since many of

the devices are password protected, owners hold the key to unlock the device. In some cases where owners are unable or unwilling to turn over the password, law enforcement has turned to the technology companies to request access. What responsibility do technology companies have to provide access to customer data?

Recent notable cases include a request by a Federal judge to Apple to unlock the phone of terror suspect Syed Farook, charged in the San Bernardino shootings in December 2015. In 2016, Bentonville, Arkansas police issued a warrant to Amazon for records from James Bates' Echo device for information that may be related to a murder case. In both cases, Apple and Amazon refused to release their customer's data to law enforcement.

This paper explores data privacy and corporate responsibility in an era of active and passive data collection by a variety of electronic devices. As the proliferation of devices continues, and the Internet of Things (IoT) broadens, this issue will likely continue to surface. The conversation about personal, corporate, and social responsibility as it relates to access of data that may provide important information about criminal activity continues. At the core of this conversation is consideration of a "reasonable expectation of privacy" and the growing number of electronic devices that collect and store data.

Proliferation of Technology

Anderson (2016) reports that 68% of U.S. adults own a smartphone. These devices that continue to increase in popularity are used for more and more applications every day. Many smartphone users are accessing their bank information, applying for jobs, paying their bills, posting to social media, tracking fitness goals, and conversing with others using smartphones.

The Consumer Technology Association (CTA) reported on technology growth year over year from 2016 to 2017 in their press release, "2017 Tech Growth Exceeds Expectations: Industry Revenue to Reach Record Levels as Emerging Categories Soar, Says CTA." According to the CTA press release (2017), sales of voice-controlled digital assistants, like Amazon's Echo or Google's Home, are expected to increase 53% in 2017. Sales of home automation technology, such as smart thermostats and IP/Wifi cameras, are expected to increase 50% in 2017; and the wearable category, like fitness trackers and smart watches, is expected to see a 9% increase in sales. Interest in and adoption of connected technology including smart appliances, smart televisions, wearables, digital assistants, and more continue to increase.

IHS forecasts that the Internet of Things (IoT) will grow from 15.4 billion devices in 2015 to 30.7 billion in 2020 and 75.4 billion in 2025 (Columbus, 2016). Thirty-four billion devices are expected to be connected to the Internet by 2020, comprised of twenty-four billion IoT devices and ten billion traditional computing devices (Camhi, 2015).

These devices are not the only way data are collected about the population. Surveillance cameras, traffic cameras, point of purchase systems, loyalty cards, and GPS locators in vehicles are just a few of the other ways data are being collected about people's movements, purchases, and routines. "Spyware and tracking cookies collect data about your search history, your age, location, interests, friends, items you liked but didn't purchase, and the amount of time you spend on a website." (CNN, 2014)

Data Collection and Privacy

How concerned are Americans about their privacy? Rainie (2016) reports that 74% of respondents felt it was very important to be in control of who can access their information; while 65% felt it was very important to control the information collected about them. Even with this concern about privacy and data collection, Rainie (2016) writes that "Americans still struggle with the nature and scope of data collected about them." The author goes on to report that "86% of Internet users have taken steps online to remove or mask their digital footprints." However, 61% say they felt they would like to take additional steps to protect their online privacy. Many are concerned that they don't fully understand how to best protect their online privacy.

According to Anderson (2016), a Pew Research poll found that 91% of Americans agree that "consumers have lost control of how personal information is collected and used by companies." A Pew Research Privacy Panel Survey in

January 2014 found that 71% of U.S. adults surveyed were somewhat or very concerned about government accessing personal information users share on social media without their knowledge. 80% were concerned about third-party advertisers or businesses accessing information from their social media posts without their knowledge (Few Feel that the Government and Advertisers Can Be Trusted, 2014).

We live in a world where data are collected constantly, passively, without our knowledge. Davis (2016) reported from the Allstate/National Journal Heartland Monitor Poll that 53% of those surveyed felt that collection and use of data violated personal privacy and individual freedoms. Baby Boomers were most concerned (61%), the Silent/Greatest Generation were least concerned (42%), and Millennials and Generation X fell in the middle (50%). Fortune (Elmer-DeWitt, 2016) reported on a Reuters/Ipsos poll where 46% of respondents agreed that the government should be able to look at data on Americans' smart phones in order to protect against terror threats. Forty-two percent (42%) disagreed.

Government and businesses benefit from data collection and usage, as do consumers. Government uses this data to enhance public safety. Businesses use the data to narrowly direct their marketing efforts to those who may be most interested, reducing clutter and marketing costs that can translate into better efficiencies and lower prices for consumers.

The issue of how businesses and government use the data collected and for what purpose arises. How far should companies go to protect consumer privacy? What is the tradeoff between privacy and public safety? When should government be given access to private data without individual consent? What is a reasonable expectation of privacy, and to what devices does it extend?

Reasonable Expectation of Privacy

"The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the person or things to be seized."

-4th Amendment to the Constitution of the United States

In order to appreciate what is at stake in the legal battle between the right to privacy and the right to know, we must first understand what has been recognized as a Constitutional "Right to Privacy." So what exactly is this "Right to Privacy" as far as the courts are concerned? Like many answers in criminal procedure, the answer to this legal question is, "It depends."

The Bill of Rights enumerates certain specific rights of the people and restrictions on the government familiar to many of us. Language specifically referencing the protections of Freedom of Speech, Freedom of Religion, Freedom of the Press, the Right to Keep and Bear Arms, the Right to Remain Silent in Criminal prosecutions, our Right to Counsel and many more fundamental rights are expressly mentioned in the Bill of Rights. An examination of the Constitution would reveal that there is no "Right to Privacy" found anywhere in the Constitution. So where did our right to privacy originate? The answer is that the Right to Privacy has developed over time, primarily focusing on the question of whether or not the government has violated the provisions of the Fourth Amendment when conducting criminal investigations.

Within case law, the earliest reference to the concept of privacy as we know it today is found in the dissent in the case of *Olmstead v. United States*, 277 U.S. 438 (1928).

Olmstead was tried and convicted in the Prohibition era of violations of laws for possessing, transporting and selling bootleg liquor. The basis of the information gathered and used by the prosecution against Olmstead at trial was gathered by government agents who placed wiretap devices on telephone wires outside of Olmstead's homes and buildings. In a 5 to 4 opinion, the U.S. Supreme Court upheld Olmstead's conviction, opining that the information gathered by the government agents which lead to Olmstead's conviction were not searches under the 4th Amendment, because the government agents did not physically enter upon Olmstead's property. This holding became known as the

Trespass Doctrine. The Trespass Doctrine would be the sole standard used in search and seizure analysis until 1967. Contained within the dissent in *Olmstead* was important language penned by then Justice Louis Brandeis. Brandeis argued that the intent of the founding fathers was to secure rights for the people and to permit the people, “as against the Government, the right to be let alone – the most comprehensive of rights and the right most valued by civilized men.” *Olmstead v. United States*, 277 U.S. 438, 478 (1928). This opinion by Justice Brandeis is credited with bringing the right to privacy to legal life.

The Court seized the opportunity to structurally develop the concept of privacy in the case of *Griswold v. Connecticut*, 381 U.S. 479 (1965). The *Griswold* case involved the issue of providing birth control contraceptive devices and information to individuals, including married individuals, in violation of Connecticut law. Utilizing the provisions of several Amendments to the Constitution of the United States, the Court held that, “[T]he present case, then, concerns a relationship lying within the zone of privacy created by several fundamental constitutional guarantees.” *Griswold* at 485. In other words, the Court recognized that while the Constitution does not specifically reference a right to privacy as a Constitutional guarantee, nevertheless, the right to privacy is a fundamental right found within the penumbra of other Constitutionally enumerated rights as contained within the 1st, 3rd, 4th, 5th, 9th and 14th Amendments to the United States Constitution.

In 1967, the United States Supreme Court again had the chance to address the concept of privacy in a context similar to the *Olmstead* case, but using different technological tools, to gather information in a criminal investigation.

The FBI suspected that Charles Katz was involved in illegal gambling. Surveillance conducted by the FBI revealed that Katz would regularly leave his apartment and walk down to the street corner, where he was observed to use a telephone booth to place telephone calls. Agents suspected that Katz was using these public telephones to place his illegal bets. In order to gather evidence against Katz, agents placed a listening device on the roof of the telephone booth where they were able to record Katz talking on the telephone within the telephone booth. Based on the information obtained through this listening device, the FBI obtained a search warrant and seized information from Katz’s apartment which lead to his conviction for illegal gambling. The matter of *Katz v. United States*, 389 U.S. 347 (1967) became the next impactful case on the development of the issue of the right to privacy.

Reasoning that the agents did not trespass upon the interior of the telephone booth to gather the information which lead to the conviction of Katz, the government urged to the U.S. Supreme Court that the conviction of Katz should stand. Counsel for Katz argued that the Court should reverse the conviction of Katz and to hold that the telephone booth was a Constitutionally protected “place” and that the FBI agents violated the right to privacy of Katz by placing the listening device on the outside of the top of the telephone booth. Writing for the Court, Justice Potter Stewart and the majority of the Court held that “[T]he Fourth Amendment protects people, not places.” *Katz*, at 351, and reversed the conviction of Katz.

The concurring opinion of Justice John Harlan in the *Katz* case set forth a two prong test when analyzing whether or not a reasonable expectation of privacy exists in a particular case. The first prong of the test is a subjective test; whether the person in question exhibited by their actions or conduct an actual (individual) expectation of privacy. The second prong of the test, an objective test, asks that even if the person exhibited a subjective expectation of privacy, is that subjective expectation of privacy one that society is prepared to recognize as being reasonable. *Katz* at 361.

So how has this reasonable expectation of privacy developed since the *Katz* decision? In 1971, the Court held no violation of a right to privacy where a police informant was wearing a “wire” and transmitted conversations with a criminal via that “wire” to an agent listening nearby (*U.S. v. White*, 401 U.S. 745 (1971)); that no expectation of privacy existed in documents voluntarily given to a bank, such as deposit slips (*U.S. v. Miller*, 425 U.S. 435 (1976)); that there is no reasonable expectation of privacy in telephone numbers dialed from a home telephone (*Smith v. Maryland*, 442 U.S. 745 (1979)); that no reasonable expectation of privacy exists in trash left out on the sidewalk for collection (*California v. Greenwood*, 486 U.S. 35 (1988)); that a reasonable expectation of privacy does exist in heat emanating from the home of a person growing marijuana, where the police measured the heat signature of the home using a thermal imaging device from a public street without a warrant (*Kyllo v. United States*, 533 U.S. 27 (2001)); where the government placed a GPS tracking device on an automobile belonging to a suspected drug dealer without a warrant, the government therefore conducted a warrantless search of the automobile within the meaning of the Fourth

Amendment and therefore in violation of his expectation of privacy under the 4th Amendment (*U.S. v. Jones*, 565 U.S. 400 (2012)). This is a small cross section of the cases decided to date involving an individual's right to privacy.

Technology appears to now be at the forefront of many 4th Amendment cases. In 2010, the Sixth Circuit Court of Appeals held that an individual has a reasonable expectation of privacy in the content of email messages (*U.S. v. Warshak*, 631 F.3d 266 (2010)); a Rhode Island Superior Court judge ruled that a suspect had an expectation of privacy in the text messages on his cellphone (*State v. Patino*, C.A. NO.: P1-10-1155A (2012)). On appeal, the RI Supreme Court upheld in part and reversed in part some of the lower court decision in *Patino*. Of particular note, the RI Supreme Court held that while the defendant had an expectation of privacy of text messages on his telephone, he had no expectation of privacy in his text messages on the recipient's telephone (*State v. Patino*, No. 2012 – 263 C.A. RI Supreme Court (2014)). The matter of *Carpenter v. United States*, U.S. Supreme Court Docket 16-402 is currently pending before the U.S. Supreme Court and is scheduled to be argued during the 2017-2018 term. The issue in this case is whether the warrantless search and seizure of a cellphone user's past location and movement information without a warrant is a violation of his right to privacy under the Fourth Amendment.

So where does the issue of privacy go from here, in a constantly changing and evolving technological world? The answer is, at best, uncertain. Do we get the same result in a *Miller* type of a case where the banking deposit is done, not in person, but on a personal device? How does the use of drones shrink or redefine concepts of privacy in and around our homes when the drone is used by a private individual? By a government agency? Does the proliferation of government use of cameras for security and traffic control further shrink our right to be left alone? Does the almost forced need for us to use technology equate to us relinquishing by our own consent some of our rights of privacy?

A more concise question to ask may very well be that question posed by the late Justice Antonin Scalia, writing for the majority in *Kyllo* when he wrote, "[T]he question we confront today is what limits there are upon this power of technology to shrink the realm of guaranteed privacy." *Id.* at 29. To date, that question remains unanswered and arguably, less certain.

Public Safety

Law enforcement recognizes the value of data stored in various electronic devices. Some devices, such as a public cameras, are often used as evidence in criminal investigations. Some law enforcement agencies have confiscated locked devices (such as smartphones, tablets, and laptops) that they believe contain information critical to an investigation. These devices may hold information that law enforcement believes could be valuable in the investigation of a crime. This information may include data stored as text messages, emails, data collected by applications (apps), social media activity, website browsing history, search history, GPS data, photos, calendar entries, and more. Currently, law enforcement depends on the device owner to provide passwords to access the necessary information. In the case where the device owner is unable or unwilling to provide the password, some law enforcement agencies have requested access from the technology companies storing the data. Once such example of that is the FBI vs Apple case.

During the investigation of terror suspect Syed Farook during the San Bernardino shootings in December 2015, federal law enforcement confiscated the suspect's iPhone. Unable to gain access to the phone without the user's password, the FBI requested that Apple provide "reasonable technical assistance" to the FBI in order to gain access to the phone's content. Apple refused.

"At the time, Apple chief executive Tim Cook called the order "chilling" and said that it would require writing new software that would be 'a master key, capable of opening hundreds of millions of locks.' Cook's argument was that if the FBI could access this iPhone, nothing would stop them from doing it to many others. Law enforcement authorities insisted that it was a one-off request. As a result the case went to court." (Kharpal, 2016) Tim Cook wrote the following in *A Message to Our Customers* (February 16, 2016), "The implications of the government's demands are chilling. If the government can use the All Writs Act to make it easier to unlock your iPhone, it would have the power to reach into anyone's device to capture their data. The government could extend this breach of privacy and demand

that Apple build surveillance software to intercept your messages, access your health records or financial data, track your location, or even access your phone's microphone or camera without your knowledge."

The case against Apple was dropped when the FBI found a third-party company, Cellebrite, to create the software to access Farook's phone. The issue of corporate responsibility in providing access to consumer's private data to law enforcement for the purposes of public safety remains unresolved.

A 2016 Pew Research study found that 51% of U.S. adults felt that Apple should have assisted federal authorities in unlocking Farook's phone; while 38% felt that Apple should not have unlocked the phone because it jeopardizes users' security and privacy (Anderson, 2016). All research on the topic, however, did not concur at the time. Fortune reported results from four additional surveys collected online. As reported in Fortune, a 2016 MarketWatch survey found 60% of respondents supported Apple's decision to protect consumer privacy; while 36% felt Apple should comply with the court order (Elmer-DeWitt, 2016). An online study by 9to5Mac in 2016 found 86% of respondents supported Apple's position; and 11% felt Apple should have complied with the court order (Elmer-DeWitt, 2016). Fortune's online study of 4,224 respondents found 71% supported Apple; and 22% who felt Apple should have complied with the court order. In addition, Fortune reported on the findings from a Reuters/Ipsos poll which found that 46% of respondents agreed with Apple's decision to oppose the court order; while 35% disagreed (Elmer-DeWitt, 2016).

Research also suggests that media coverage of national security concerns, such as the San Bernardino case, impacts how consumers feel and that those feelings begin to change as time separates us from the media coverage. Not surprisingly, more individuals are likely to support national security initiatives (such as accessing private data without consent) immediately following a national security event. The public's willingness to allow federal authorities to access private data for the sake of public safety declines as time separates us from the national security event (Tibken, 2017).

What are the legal and social responsibilities of corporations to provide password protected data in the name of public safety and security? Corporations are stuck between protecting the privacy rights of their customers and doing what is best for public safety. Corporations must consider the impact of releasing password-protected data on consumer trust in the company, and consumer's likelihood of remaining loyal to the company. If Apple had complied with the FBI's request, would consumers fear the loss of their own privacy with Apple's products and move their allegiance to another brand? On the other hand, would Apple's compliance have won the favor of more consumers who would have praised Apple for assisting federal authorities and improving public safety? Fortune (Elmer-DeWitt 2016) reported on the findings of a Piper Jaffrey poll which asked, "How do you view Apple in light of its refusal to help the FBI?" Twenty-four (24) percent felt more favorably, 23% felt less favorably, and 17.8% felt the same (35.5% knew nothing about it).

The corporate financial impact is certainly a consideration, but the companies may not have a choice in the matter if Federal courts rule that there is no reasonable expectation of privacy when electronic devices capture personal data. It also appears that the question of reasonable expectation of privacy may be device dependent, and that the courts would need to consider the question for every different device developed over time. As of now the issue remains unresolved.

CONCLUSION

The conversation about privacy rights and public safety continues. The opportunity to resolve the issue in the Apple VS FBI case was lost with the third-party solution for access to Farook's iPhone. Although not resolved, the situation continues to linger while technology continues to grow and gather even greater volume of data. Privacy advocates fear we have opted into social activity and convenience at the expense of our privacy. Others support access to private data in support of public safety. Not surprisingly, research has shown that the pendulum swings more toward public safety following a national security event, and then gently returns toward right to privacy as we are separated from the event.

Consumers should be aware of the data gathered by the electronic devices they buy and use, and how the data could possibly be utilized. Consumers can only protect their privacy if they know how and when their data are collected,

and are vigilant about reading and understanding privacy policies before agreeing to them. Consumers should make a conscious choice when providing access to their data, often at the expense of convenience. They must also understand that technology companies cannot guarantee protection of their private data from government agencies holding a subpoena. No privacy policy can guarantee that protection.

Technology companies remain torn between protecting the privacy rights of their consumers and supporting public safety efforts. On one hand, releasing consumer data may violate the trust consumers have with the company which could impact corporate revenue. On the other hand, the general public may support the release of the data that aids in public safety, especially in the case of national security. Although technology companies are bound by their own privacy policies with consumers, federal authorities are not party to the privacy policy and may subpoena information critical in an investigation. As of now, most technology companies have opted to do all they can to protect their customers' privacy.

The core of this issue lies with determining the "reasonable expectation of privacy" with the growing list of technology devices that capture personal data daily. Not until this issue has been heard and resolved will a better understanding of corporate social (and legal) responsibility be addressed.

Ultimately, the conflict between a right to privacy and a government agency's right to know will be resolved by both the legislature as well as the courts. The legislature will need to carefully draft and implement new laws to address the impact technology has on privacy. The courts will need to determine how to strike a balance between a perceived right to privacy and the government's need to know on a case by case basis.

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Keynote: Proposing Preposterous Propositions For imProving Pedagogy

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ABSTRACT

Faculty often desire students to be more intellectually engaged during class, yet struggle mightily with finding ways to help students practice critical thinking in meaningful ways. Given that students are deluged by a relentless waterfall of information from social media, news sites, cell phone apps, and email, helping students learn to be attentive to the possibility of “fake news” coming across their screens provides a unique teaching opportunity. I argue that a unique and rich teaching opportunity exists by giving students preposterous propositions and asking students to determine (i) what evidence they would need to authenticate or disprove the proposition and (ii) to evaluate that evidence in light of the proposed preposterous proposition. As but one trivial but illustrative example, one might preposterously propose that the US has the largest number of births per person per year in the entire world.” To determine if this is indeed fake news, students would need to identify what evidence would be useful and subsequently find and use that evidence to respond to the proposition. Used weekly during class to stimulate collaborative discussion, students seem to find these preposterous propositions to be most engaging when presented in the form of news headlines or 140-character social media-style tweets as a way to break-up extended lecture periods to enhance and increase student intellectual engagement during class.

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IMAGE OF SPEAKER: <https://tinyurl.com/yayva6c9>

The Syrian Refugees Crises And Its Effects On The Jordanian Educational System At Irbid Governates Schools

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ABSTRACT

The study aimed to find out the effects of the Syrian refugees Crises and its effects on the Jordanian educational system at Irbid Governorates Schools from school principals point views. The qualitative approach was used to answer the study questions. A random sample of the school principals that host Syrian refugee's students was selected and interviewed. The study results revealed that the educational system in irbid schools was affected by the Syrian refugee's crisis. The results showed that the main effects include: Crowded classes; double shift schools system; drain of resources; unacceptable and negative behavior, and ethical and cultural effects. The principals suggested to reduce these effects: special schools for Syrian refugee's students; cancellation of double shift schools; distribution of refugees students all over the governorate schools; and more training for teachers and administrators.

INTRODUCTION

Jordan received influx of refugees during the last few decades from Arab countries. Many conditions in these countries lead to this situation, for example, the Iraqi crises since 1980-2003, then the Syrian ; Libyan, and, finally the Yemenis. The most effect and deep is the Syrian one, because of neighborhood and close social, economic, and political relations and ties between the two countries.

This complicated crisis resulted in a large number of refugees into Jordan. This number was excesses (567,000) on December 2013, and reach 800,000 as of the end of December, 2014(Luigi,2015).

Even though, Jordan was supported to face the situation of the Syrian refugees, this support was not enough to provide services to refugees and host communities.. Jordan as whole, and particularly host communities in northern Jordan,has many difficulties to cope with this situation as the population increase and more demand for goods and services occur.

As a result, the rate of inflation and unemployment was increased. (Smiran & Smiran, 2014).

About 80% percent of the Syrian refugees in Jordan live in the host communities, while, just 20% of them live in refugee camps. The Syrian refugees crises required more humanitarian support from the international community. Also , basic service for both the refugees and host community must be improved. (REACH,2014).

The Syrian refugee's number in Jordan exceeds 20% of the Jordanian population in 2014 with the crisis intensifying in Syria. The Jordanian government with co-operation with the international organizations start opening many camps for those refugees. A large number of these refugees separated through all over the country in villages and cities of Jordan. The Jordanian Council of Ministers decided on 9/7/2012 according to the foreign minister recommendation to build up emergency camps for the Syrian refugees in Jordan and to allow the international organizations to do the same and start receiving those refugees in an official way. This council, also, decided to name the Jordanian Hashemite Charity Organization as a supervisor for the management of the Za'tari refugee camp. The UNHCR shall bear full expenses of the camp in according to signed agreement, while, the Jordanian Hashemite Charity Organization is responsible for receiving and distributing all material and financial assistance to Syrian refugees from local and international associations. The Za'tari refugee camp considered as the biggest camp and the fifth big city in Jordan as its population exceeds 160 thousands (Zad Jordan,2014).

Studies showed that Jordan has been affected in its economic and social life by the Syrian refugee's crises. In one study made by the Economic & Social Council (ESC), the monetary effect on the Jordanian economy was estimated as (590.100.000) million jd's for the year 2011-2012, which equill to (3%) of the Gross National Product (GNP).(The Economic & Social Council, 2012).

A study (Reach, 2014) aimed to estimate the effects of the Syrian crisis on Jordanian host communities to explore the sector issues facing the northern Jordan communities as well as Balqa and Zarqa. Reach study used three steps to collect its data and answer its questions. The first step was literature review. The second was primary data collection; and the third was focus group sessions, and workshops with local community institutions. The study results revealed that a lot of tension found within host communities because of Syrian refugee's crisis. More and more pressure was found on resources like housing; education services, water, and other energy resources. As the Syrian refugee's number increases, the gap between supply and demand of resources like education services; water; and other resources increases. The pressure on host communities regard these services is very clear. Some host communities have higher level of stress due to the number of refugees in that community. Also, the results showed that over 20% of Irbid governate communities reported tension. The results also, revealed that housing, education are the most sectors that cause tension on host communities of northern Jordan.

Many issues in education system appear due to the Syrian refugee's crisis. Host communities are concerned about the quality of education that resulted from shortened class times and overcrowded classrooms. Ajloun and Jarash governates reported that tension may lead to many effects on other sectors and not for the education sector only.

Other studies, (Szparaga, 2014) revealed many other negative security effects on Jordan community. In the economics sector, the Syrian refugee's crises caused the price of houses and other goods and services to increase rapidly. a country that has many economic issues and budget deficit can't cope with the large number of refugees and their needs.

In his study, Philips (2016) showed that education expenses for Syrian refugee's students increased from Jd 26.73 million as of 2013 to Jd 41.95 million in 2014. He also, reported that Jordan has waived the educational fees for Syrian refugees. The total of the Syrian refugees increase from 83,000 in 2013 to 120,000 in 2014, about 80% of them were live in host communities not in the refugee's camps. This is resulted in crowded class rooms and the need for double shift schools and new schools and teachers.

The Emergency Education Response (EER) program reported that about 130,000 Syrian refugees students were provided with formal education in Jordan , in addition to 35,000 were provided with informal education. Also, the program offered furniture and equipments to 69 schools. The program offered, also, training for 2,100 teachers as well as psychosocial support for refugee students. The program indicated that many substantial problems still need to be faced. Among these problems is that about 50% of the Syrian refugees still out of schools . In addition, there is the problem of crowded classrooms; teachers face a lot of difficulties in the classroom; and there were few are trained to face psychosocial problems of Syrian refugees. (Culbertson etc., 2015).

Another study (Culbertson & Constant, 2015) about the education of Syrian refugees in host countries revealed that host communities sacrificed to provide education to refugee children. This type of education faces many problems. The most serious was the quality of education. , To face this situation, the researchers point out some recommendations. Among those recommendations is : to provide enough time to both first and secondary schools.

The former minister of education in Jordan indicated in his speech in the last "International Forum of Education under Crisis and Emergency Cases" that the number of Syrian refugees in Jordan is about(1.5)million which is equal to 20% of Jordan population. He pointed out that there is (145,000) Syrian students in Jordanian schools, all of them treated as the Jordanians, and there are (90,000) students waiting for the opportunity to enter schools. The minister, indicated that the Syrian refugees have a very severe stress on Jordanian limited resources and infrastructure , the cost

of providing education for those students is (250) million jd's. the ministry of education built about (5000) new classrooms that cost about (600) million dollars. He added that 98 public schools shifted to work two shifts a day and they will be 198 schools next year (Ministry of Education, 2017).

Irbid is one of the biggest cities in Jordan; it located in northern Jordan far about 10 miles from the Jordan-Syria border. There were (690) schools in Irbid governorate with (251880) students (MOE, 2015).

Irbid receives a large number of Syrian refugees, more than (6000) students. Irbid schools had many effects because of the Syrian refugees. This study investigated these effects from school principals point views who directly deal with this crisis.(Swtmowatn,2017).

Problem of Study

Most of the studies focused on the general monetary and economic effects of the Syrian refugees' crisis, and most of them based on UN and international agencies reports. The problem of the current study is aimed at exploring the day to day effects that face teachers and administrators of refugees host schools in Irbid governorate and to suggest solutions to this crisis from irbid schools' principals point views.

Study Questions: the study aimed to answer the following questions:

- 1- What are the effects of the Syrian refugee student's crisis on Irbid schools from their principals point views?
- 2- What are the suggestions to reduce negative effects of the Syrian refugee student's crisis in Irbid schools from their principals point views?

Study Importance

- 1- It is hoped that the results of this study might provide better and clear information about the effects and suggestions regard the Syrian refugee student's crisis in Jordanian educational system.
- 2- The results might help decision makers in the high level of education system administration in Jordan in the way to reduce the negative effects on the school system.
- 3- The results might help the UN and international agencies in their decisions regard the refugee's education.

Terms & Concepts

- Syrian Refugees Students: In this study Syrian refugees students means all Syrian refugees students both who registered by UNHCR and who not and hosted by Irbid schools.
- Irbid Governorate Schools: All Irbid schools that received and host Syrian refugee's students.

STUDY SCOPE & LIMITATIONS

This study aimed to find out the effects of Syrian refugee's students on the Jordanian school system in Irbid schools. The study is limited to a sample of school principals who receive Syrian refugee students in the schools of Irbid governorate for the academic year 2016/2017.

METHODOLOGY

The researcher used a qualitative research approach to answer the study questions. The study population was the Jordanian public schools principals in Irbid (who host Syrian refugees students) at the academic year 2016/2017. Most Syrian refugee students are concentrated in 28 public schools in Irbid. A random sample of 15 principals was interviewed.

The tool of the study was the interview. The interview questions were checked by ten experts for validity. The interviews content was analyzed to answer the study questions. A consensus of 50% of those interviewed was adopted to consider the effect.

RESULTS & DISSECTIONS

The first question of the study was : " What are the effects of the Syrian refugee student's crisis on Irbid schools from their principals point views?

The interview content analysis revealed the following effects:

- 1- Crowded classes: this result was mentioned by all the fifteen principals (100% of interviewees). One of the principals said: "In my school the average of the class size is about 60 students, it was less than 40 students before the refugee's crises". Crowded classes do not allow teachers to do their job as it should be done; this leads to poor quality teaching. This case leads to difficulties in class room management, and more violence between the students. One of the interviewees pointed out: " I spent most of my day solve students – student problems. Another principal said " I can't even stand in the class, one of the teachers one day came to me weeping as she could not control her class because of this situation". There is no even time for the wash rooms and the school shop for students to use in the free time period because of the large number of students; one of the principals said " I watch the students in the daily free time period, less than half of the students get their needs before the 15 minutes period last" .In addition, this large number of students (oversized schools) lead to multifaceted effects especially resource depletion and cultural norms violations.
- 2- Dobell shift school system: this effect mentioned by 13 of the fifteen interviewees (87%). Two period schools system has many negative effects on teaching and school administration. First of all shorten class time to 35 minutes instead of 45 minutes means at least one hour less daily than one period school system. One principal said "every day I receive complain from parents about their kids teaching, they feel that teachers do not give enough time to their kids". Shorten the class time to 35 minutes means reducing the available time for teaching students in about (23%). This situation will affect both the quantity and quality efficiency of education. The first period (shift) starts at seven in the morning, which is too early in winter, therefore, a large number of students come late to school, especially, female students. Usually, the second period students come to school two hours before their start time, which cause chaos and disorder in the school day.
- 3- Over use of school resources (drain of resources): this includes school furniture, equipments and building. This negative effect came as the third effect in order. It is mentioned by 12 of the interviewees (80%). The principal of the largest school host Syrian refugees said: "We need maintenance service more than once during the year for the doors, lights, wash rooms, and water taps". Another principal added: "The chair and table that supposed to be used by 6 students, now, used by 25 students, therefore its time live reduced from five to one year".
In addition, more fiscal resources were required; new buildings; new class rooms, new furniture; more rest rooms, and other Subsidies.
- 4- Unacceptable and negative behavior: This effect came in the fourth order among the effects. It mentioned as an effect by 10 principals (67% of the interviewees).Schools experience various unacceptable types of student's behavior. "We find bad words been written on the board" a school principal said. Many violence cases between students observed. This phenomenon might be explained with the fact that both the Syrian students and the Jordanians are under high level of stress. Many Syrian refugees in Jordan lose their fathers or don't know anything about them, others with bad life conditions. In the same way, Jordanians feel that they are been competing with everything in their school. Also, those students who are in double shift schools experience a psychological stress to come at seven o'clock in the morning, while, their peers have a regular school at eight o'clock. In addition, because of the Syrian refugee's home and out school conditions, some of them fail to pass their classes and others dropout of

- schools, which consider as "Educational waste". This waste is one of the main factors to reduce the internal efficiency of schools.
- 5- Ethical and cultural effects: This effect mentioned by eight interviewees (53%). Even though, Syrians and Jordanians share the same General Arab culture, there still, special culture components differences. Among these differences, early age of engagement among female Syrian students; more free relationships; parents different expectations from schools. Syrians feel that school teachers and administrators are too much serious and should be more easily. This situation, in addition to the other previous effects cause more stress to school teachers and administrators. School teachers and administrators need more training to deal with this situation and cross-cultural differences.

Some principals (20% of interviewees) mention some positive effects as a result of the crisis. For example, the UN agencies provided more training for new teachers who hired for the Syrian refugees students, and more maintenance for school buildings and material recourses.

The results of the second question

The second question was: "What are the suggestions to reduce negative effects of the Syrian refugee student's crisis in Irbid schools from their principals point views?"

To answer this question, the researcher analyzes the content of the fifteen interviews. To consider a suggestion, a consensus of 50% of those interviewed was required. The results revealed the following:

- 1- Special schools for Syrian refugee's students: This suggestion mentioned by twelve members of the sample (80%). The researcher thinks that this suggestion came in the first rank of the suggestions because, the principals understand that Syrian refugee students need special care and treatment; need teacher with special training. Also, in this way, no need for double shift schools. These separate schools can be financed from UN agencies. In this way, different teachers and school administrators will reduce the stress in the public schools and host community. One principal said: "As there is a lot of UN support, the Syrian refugee's students should be in separate schools". Another principal added: "At least it should be another school administration for the evening period". This suggestion provides more jobs for Jordanians and reduces resources depletion.
- 2- Cancellation of double shift schools: This suggestion came in the second order of the suggestions. This suggestion was recommended by ten of the interviewees (67%). Double shift schools have many negative effects to both students and teachers. Among these effects, shorten class time; start very early in the morning, over using of school resources, and many other effects. Mostly, double shift schools are less internal efficiency as the school time is shorten and there is no full control on resources.
- 3- Distribution of Syrian refugees among a large number of schools: This suggestion mentioned by nine principals (60%). Most of the Syrian refugee's students concentrate in certain places in Irbid governorate. For example, among the twenty eight schools that host Syrian refugees, there is nineteen of them in Irbid city. Irbid governorate as a whole has (690) schools and Irbid city, alone, has (385) schools. Refugees chose certain areas to live due to work and housing opportunities. Distributing Syrian refugees students all over the governorate schools, will reduce the negative effects like crowded classes, double shift schools, and other social and cultural effects.
- 4- More training for teachers and administrators: this suggestion came from eight of principals (53%). principals think that more training for teachers and administrators in the ways to deal with this crisis might help reducing the effects of this crisis. Teaching and managing crowded classes needs special treatment. Dealing with students with special psychological conditions needs special training.

CONCLUSION

The study results revealed that the educational system in irbid schools was affected by the Syrian refugee's crisis. The results showed that the main effects include: Crowded classes; double shift schools system; drain of resources;

unacceptable and negative behavior, and ethical and cultural effects. Also, the principals suggested to reduce these effects: special schools for Syrian refugee's students; cancellation of double shift schools; distribution of refugees students all over the governorate schools; and more training for teachers and administrators.

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The Importance Of Graduate Student Leadership Development Through Self-Branding

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In her article, *Self-Branding & Professional Social Media: Tips for Graduate Students*, Bira (2015) advocates that graduate students should engage in intentional leadership activities that promote their expertise and knowledge. In a leadership preparation program at a Midwest university, graduate student's express frustration with the de-emphasis on personal leadership development. Utilizing a class assignment to describe graduate student perspectives on leadership development, students indicated a desire to have leadership traits identified, the need for more organizational opportunities to exhibit leadership, and faculty support to guide the personal leadership development process. Kang, (2015) posits that personal branding should be taught in colleges and universities, stating that the majority of students are unable to articulate what they stand for and what attributes and skills make them unique as individuals, let alone how to promote themselves as they move into careers. Bira (2015) concludes that self-branding challenges the traditional model of academia, but it remains a critical skill for graduate students to create a more creative career path.

Llopis (2013) defines a personal brand as, "the total experience of someone having a relationship with who you are and what you represent as an individual; as a leader." The business world offers evidence of the need for the development of personal branding as a skill set among college graduates. Organizations continue to acknowledge the importance of crafting a personal brand both in person and online, so much so, as many choose to offer advice to those desiring to create and project a personal brand identity (Safko & Lon, 2009).

Today, developing one's personal brand is a required component in the advancement of an individual's career and personal development as a leader (Llopis, 2013). Initially presented by Tom Peters 1997 article, *The Brand Called You*, the premise for self-branding, that every individual can "be their own brand." As a result, Peters (1997) posits that a person's primary job is to be their own marketer, remains relevant as much today as when initially presented. Just as with social media, self-branding constitutes a full-time commitment to the process of identifying one's self as a leader, and the implications as it relates to one's ability to serve others (Llopis, 2013). Additionally, Sullivan (2015), argues that nobody understands one's skill and abilities better than the individual and that a personal brand is something students can continue to utilize in employment searches, future jobs, and through whatever challenges that occur throughout life and career.

Labrecque, Marcos & Milne, (2011) concluded that social media dictates that in an online context, personal brand identity relies on self-presentation facilitating the creation of a personal identity in computer-mediated environments utilizing social networking profiles, blogs, and personal web pages. Social media has become ubiquitous. Online media now facilitate personal branding instantaneously and require self-branding as an important marketing activity for people each day (Shepherd 2005). Further illustrating the need for active self-brand development, Labrecque, Marcos & Milne (2011) concluded that self-branding has "become inevitable when participating in an online environment." Online services such as Facebook, Indeed, LinkedIn, Twitter, and even a personal website allow students to promote personal brands continuously. Critical to online personal brand development is an articulated, relevant and consistent message, conveying one's personality, beliefs, skills, experiences and potential value to an organization (Davenport, 2017).

Hullinger and Hogan (2014) make the case that graduate students come to the university with significant anxiety and mental stress. If not addressed properly and promptly, this may lead to graduate student attrition. Graduate student

anxiety includes fear of failure, uncertainty about making the transition from undergraduate studies, what to expect, and extreme anxiety about competing with academic peers (Phillips, Daubman, and Wilmoth, 1986; Taub and Komives, 1998; Pooch, 2002). While initial entry into graduate study may be stressful, it also presents unique opportunities to work with students on leadership traits such as self-confidence, self-esteem, integrity, and authenticity.

The City University of New York created a Futures Initiative that helps graduate students learn how to mentor others, generate innovation, implement follower development and apply learning to future generations (The City University of New York, 2017). This early introduction to leadership actions is a promising practice that is being lauded by enrolled graduate students.

Graduate students in a Change Leadership course in a Midwestern university advocate “creating the change you want.” In a series of essays graduate student postulate intentional actions and stepping outside of one’s comfort zone are crucial to leadership development. Norris (2001) supports this assertion in stating that by leaving one’s comfort zones we are allowed to develop abilities and skills, initiate and develop new relationships, test ourselves and develop a sense of self-confidence. Many students identified self-branding, fostering relationships and networking, and being an active participant in coursework as being vital to personal growth and preparation for futures in leadership positions. As one graduate student affirmed,

“As a change leader, one must be able to look at the 168 hours (per week) they have and be able to figure out how they are going to serve others as well as themselves. It boils down to relationships. A leader must have a relationship with oneself, knowing your own brand, before you can service others.” (Peer Advice Booklet, 2017)

When graduate students develop a sense of self and understand the role of branding in leadership, a sense of purpose and confidence develops (Kang, 2015).

Research on leadership has focused on the skills or traits that make a leader effective (Northouse, 2016). More recently, demand for trustworthy and honest leaders has justified research on developing authentic leadership rather than developing the traits and skills of leaders. One approach identified five characteristics of authentic leadership demonstrated by successful leaders (George, 2003; George & Sims, 2007):

1. A clear understanding of purpose
2. Strong values
3. Develop relationships based on trust
4. Exhibit self-discipline and act on values
5. Impassioned by their mission

For authentic leadership to be effective, leaders must be extremely self-aware. This approach to leadership mirrors the goals of personal branding and where higher education cannot teach future leaders new traits, students authentic leadership and self-brand can be developed.

Self-branding is a lengthy and ongoing process (Philbrick & Cleveland, 2015; Davenport, 2017) that requires defining the existing self-brand, critical introspection, and identification of a path towards the desired brand image. According to Llopis (2013), the number of professionals who have developed a well-rounded personal brand under 15% and less than 5% implement their branding plan on a daily basis. The low numbers are attributed to the fact that the personal or self-branding process is lengthy, ongoing, and requires significant self-reflection and planning. A misconception identified by Llopis is that individuals were thinking about self-promotion and not about how advancing personal brand would aid in service to others.

In a personal branding workshop, Building Me, Inc. (Holmes, Hahn & Perry, 2017), participants are asked to participate in five exercises to aid in crafting their unique personal brand:

1. Identify perceptions of oneself by peers
2. Distinguish key traits or characteristics of their persona
3. List elements of their brand promise

4. Determine three behaviors that promote personal brand
5. Develop a personal brand statement or tagline

Although the workshop lasts up to an hour and a half, course content is an introduction to self-branding that aims to inform participants of the various components of a well-rounded brand and encourages thinking of oneself as a brand. Additionally, as individuals grow and change the brand needs to be revisited to ensure intentional actions are being taken to achieve desirable outcomes. Graduate students are presented with the concept that as a leader if one's teammates and colleagues do not know what that individual's brand is, the fault lies with the individual and not the teammate or colleague (Llopis, 2013). The process of creating a personal or self-brand requires a commitment to self-reflection and analysis, both of which will facilitate the student's ability to get to know themselves (Davenport, 2017).

With the increasing cost of graduate programs (Adamiak, 2011) it is important for universities to develop individuals and leaders who are prepared to enter or re-enter the workforce to ensure high placement ratings. Duis (2013) highlighted several individuals who utilized personal or self-branding to help create a career path. Additionally, evidence suggests that many students have a significant amount of resources that are not being utilized to create individual brands. Although higher education institutions may not promote the development of personal brands directly through the curriculum, some universities offer graduate students services and online resources that are designed to aid students in building a personal brand to assist in achieving career success.

Graduate students desire a curriculum that prepares them to enter or re-enter the workforce. The process of self-branding is a lengthy and ongoing process that requires guidance and self-reflection. Self-branding is crucial for these students to obtain job placement, create a career path, and to become successful leaders.

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Scopes And Challenges Of Using Web-Based Technology In Physics Problem Solving

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ABSTRACT

Problem solving is an important skill that is valued both within and beyond academics. Physics courses emphasize problem solving. Teaching physics problem solving to students using a systematic approach can be useful in two ways. First, it helps students consolidate physics understanding. Second, students' pattern of solving physics problems using cognitive science-based systematic approaches can be transferable to new settings and situations beyond physics courses. Most common method of problem solving coaching in a systematic way is through recitations and/or help sessions in a majority of the higher education institutions. Not all students can benefit equally from such sessions because students have different preparation level and pace of learning of physics problem solving. Computer-based technology have potential to facilitate problem solving for diverse student population because students can pace their own problem solving. In this presentation, I report our effort of designing and implementing web-based computer coaches for physics problem solving. We have collected evidence suggesting a positive impact of the use of computer technology in promoting students' problem solving within a regular instructional setting. However, many students do not seem to know how to use the web-based tool effectively in their problem solving tasks. Thus, although computer technology has the potential to act as an effective tool for teaching problem solving, the level of students' sophisticated views about problem solving and about coaching seem to have a significant influence in both implantation of the tool and in achieving the desired outcomes.

Proposing A Q Methodology Approach To The Evaluation Of Instruction

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INTRODUCTION

Q methodology was proposed by Williams Stephenson (1935) as a methodology to provide a scientific method to study subjectivity. The primary goal of Q methodology is to uncover how and why people think the way they do (Brown, 1993) about a topic. The technique uses factor analysis however, transposes the items and people from the more traditional R factor analysis technique. Stephenson early work on Q methodology published in Character and Personality titled Correlating Persons Instead of Tests (1935), provides the conceptual underpinnings for the technique. This technique allows the researchers to develop families or groups of people based on how they rate items from a card sort.

The purpose of this presentation is twofold. First, the presentation will describe the technique and provide participants with a handout that highlights the steps used in a Q Methodology study. Additionally, the presentation will give findings for how this technique has been used in the evaluation of teaching.

METHODS AND TECHNIQUES

The methods used for this study will be a focus on the presentation. Table 1, provides an overview of the steps that will be described. The process will start with the design process and include the collection of data and analysis phases. The data analysis will describe a number of software tools that can be used for a q methodology study. Details will be provided on how the R software and the 'qmethod' package is used for the analysis of subjective perspectives.

Table 1. Steps in Conducting a Q Methodology Study

Phase	Step	Action
Design	1	Identify people to study
	2	Identify topic on which opinions vary
	3	Develop concourse (evaluation questions)
	4	Select the Q-set (sample from concourse)
	5	Develop distribution scale (sorting range)
	6	Develop interview protocol
Administration	7	After instruction is provided, provide sort instructions 'Condition of Instruction'
	8	Provide statements and instrumentation
	9	Conduct the sort or sorts and record answers
Analysis	10	Conduct factor analysis
	11	High, low, and distinguishing statements for factors
	12	Consensus and Disagreement table
	13	Comparing factors
	14	Integrating quantitative and qualitative analysis
	15	Name factors and explain how and why

FINDINGS

The presentation will provide how a concourse was conducted for this specific Q methodology approach to evaluate instruction. Q methodology is a valuable research technique, as well as, a method instructors can use in the evaluation of instruction. The purpose of this research was to understand how and why people think they way the do towards instructional that has been received. The participants for this study all are students that participated in a graduate level education course. The process of conducting the Q study will be described from the start of the project to the completion of analysis. The findings from this study will provide an innovative way to examine instruction and could be used for other professional development.

DISCUSSIONS AND CONCLUSIONS

A discussion will be provided to examine other uses of Q methodology for research projects and evaluation. Parts of the process that are often challenging will be discussed. Additionally, common mistakes will be provided and techniques to avoid this issues will be provided. The presentation will conclude with exploring other uses of Q methodology and the best resources to implement the technique.

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Texas Freestanding Emergency Center: An Analysis Of The Payer Mix

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ABSTRACT

In 2009, the 81st Texas Legislature enacted the Texas Freestanding Emergency Medical Care Facility (FEC) licensing act. This act gave the Texas Department of State Health Services the ability to develop rules and regulations that establish minimum standards for licensing a FEC (Texas Department of State Health Services, 2017). A Freestanding Emergency Medical Care Facility is defined as a medical care facility that is structurally separate and distinct from a hospital that provides emergency care (Texas Department of State Health Services, 2017). The act was intended to increase emergency care options in rural areas.

A recent study, found that FECs primarily chose a location zip code with higher median income and private insurance (Schuur, Baker, Freshman, Wilson, & Cutler, 2016). This would imply that the private health insurance and employers offering health benefits are bearing the costs associated with a FEC visit. The focus of this study is to provide an analysis of the Texas FEC market by zip code and payer mix (private vs. public health insurance).

The payer mix is comprised of three 3 levels of private health insurance and 3 levels of public health insurance. The private health insurance industry is encompassing employer based, direct purchase, and Tricare/military. Whereas, the public health insurance industry includes the government sponsored products of Medicare, Medicaid, and VA Healthcare.

The Texas FEC market consists of 215 licensed locations in 52 counties; which approximates 20% of Texas counties have at least one licensed FEC. At the zip code level, the majority (91.29%) of zip codes in Texas have no FECs located within their region. The remaining 169 zip codes have one or more FECs in their zip code region.

An analysis of the health coverage type results in a staggering variance between a zip code with no FEC versus one or more FECs. The average number of privately insured in a FEC zip code is four to five times the number of insured than that of a zip code without a FEC.

An FEC is a business and their profitability is determined by visit volume and profit margin per visit (Schuur, Baker, Freshman, Wilson, & Cutler, 2016). By selecting zip code locations with very high private health coverage (employer based or direct-purchase), the FEC is increasing their potential profitability. As the FEC market continues to grow in Texas, it is important to understand the payer mix and the impact to the insurance community by the location of a FEC.

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